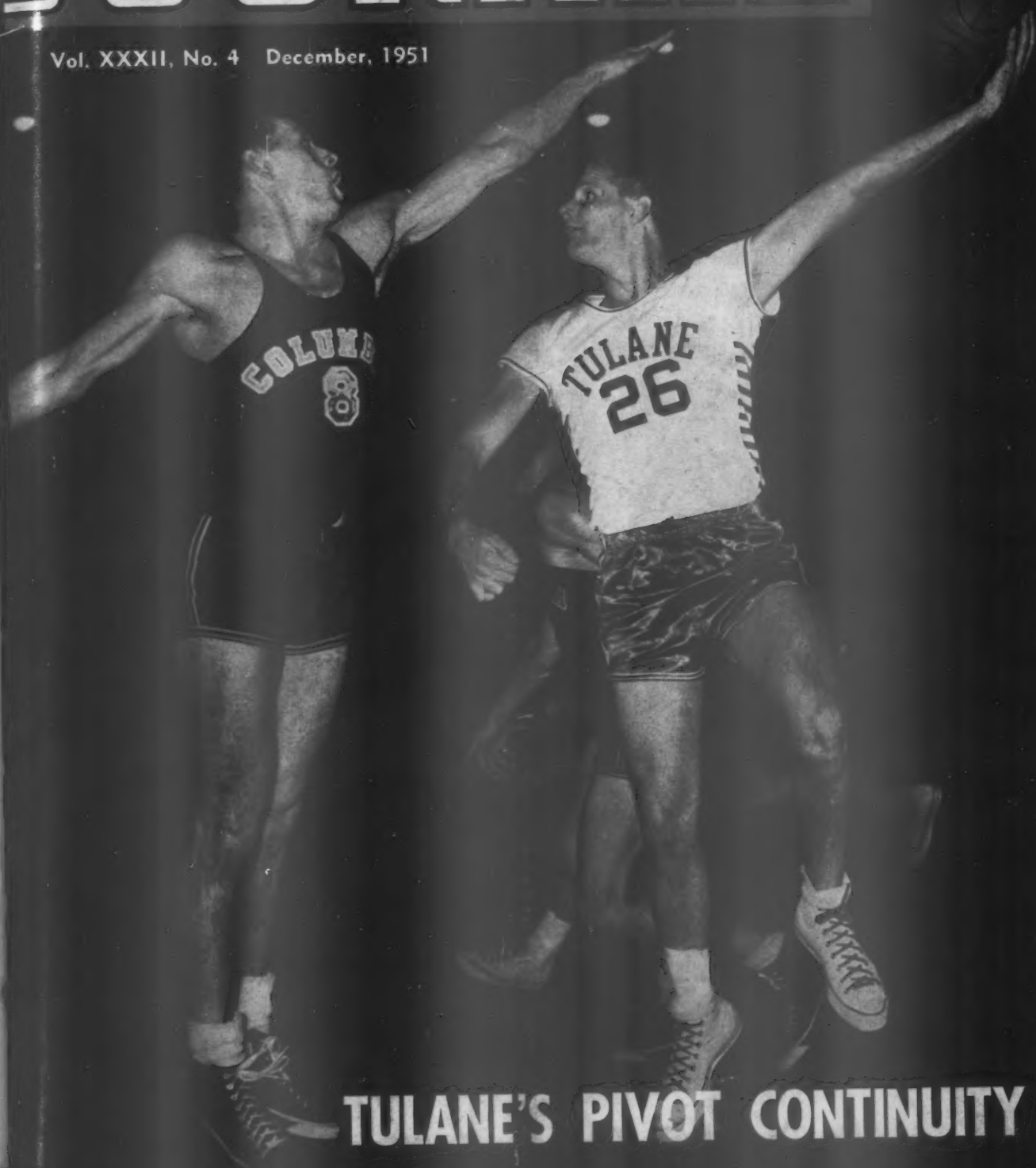


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Vol. XXXII, No. 4 December, 1951



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Number 4

DECEMBER, 1951

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FRONT COVER ILLUSTRATION

Ralph Pedersen, fancy ball-handler for Tulane's Green Wave, gets off a left-handed hook shot against Columbia in a game played last winter at Tulane.

For next month—The Sixth Annual Athletic Journal track meet and high school honor roll; a survey of leading track coaches on track and field facilities; an article on indoor baseball drills; a sequence action spread on parallel bars and more basketball articles start off 1952.

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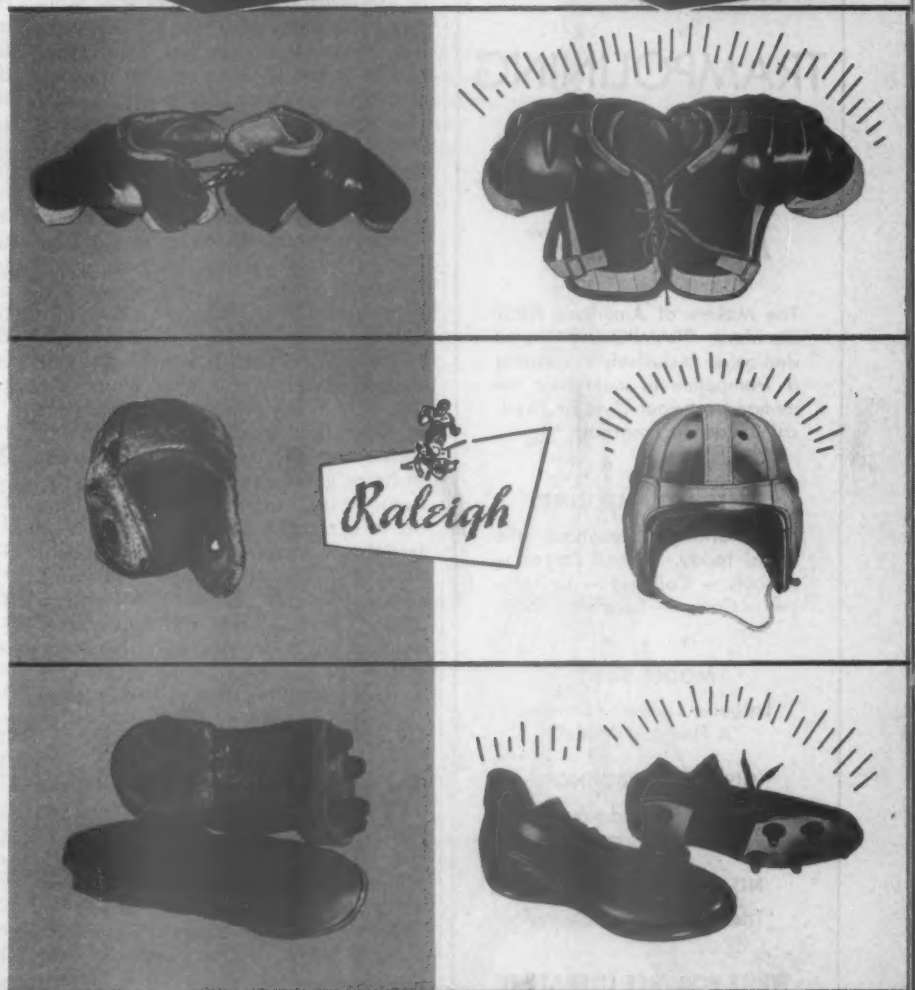
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FROM time to time, we mention outstanding coaching records in this column. Just to keep in the swing of it, we offer the defensive record that the late Dan McGugin compiled during his thirty years as head coach at Vanderbilt. His teams played 268 games, with the opponents averaging but 6.2 points per game. Among some of McGugin's captains were Ray Morrison, Josh Cody and Jess Neely . . . This football season has been especially notable for long runs. It was not always thus, for just last season Texas, in winning the Southwest Conference Championship, only had two runs over thirty yards in length . . . Fendley Collins, Michigan State's wrestling coach, was a member of the 1926 Oklahoma Aggies team that won the first Missouri Valley Championship for the Stillwater school . . . Golf, which was dropped by Penn State as an economy move, has been restored to their sports calendar . . . Much has been made of the advantage of the home court, but last year Wisconsin hit .307 per cent of their field goal attempts in away conference games and .301 per cent in home games. In the same games the home teams hit .295 and the visitors on Wisconsin's court hit .288. The free throw percentages were Wisconsin away .597, Wisconsin home .603, home teams .603 and visitors at Wisconsin .694. There is not an appreciable amount of difference in either case, but if the nod goes anywhere, it goes to the teams playing on other than their home courts.

...

WE of the Athletic Journal have been honored in that the late Major John L. Griffith, founder of the Journal, has been elected to the Helms Hall of Fame. Theodore Roosevelt, who was also elected this year, Walter Camp, Dean Cromwell, Dwight Davis, Baron Pierre de Coubertin, William M. Garland, Connie Mack, James Naismith, Albert Spalding, James E. Sullivan, Knute Rockne, Amos Alonzo Stagg and Grantland Rice are the others who have been honored by the Helms Athletic Foundation . . . It seems that painting is becoming a popular hobby for foot-

ball coaches. Everyone is acquainted with Bob Zuppke's prowess with the brush, and in October we reported how Wayne Replogle, Kansas end coach, painted a picture for the town of Cimarron, Kansas. Now comes John Mason, grid skipper at Montana State. Mason has painted numerous landscapes . . . Probably no conference has had as big a turnover of members as the Missouri Valley Conference. During the forty-four years that the conference has been in existence, twenty schools have at one time or another belonged to it. Outside of the present members and those pulling out to form the Big Six; Washington, Grinnell, Butler, Washburn and Creighton were members at one time . . . Packed immediately following the Illinois-Washington game, the airline weight showed that the Illini uniforms were 200 pounds heavier than on the westward flight, indicating that a football team loses a few pounds in a tight game.

...

WHEN Andy Coakley, the grand old man of Columbia baseball retired after 37 years of coaching the Lions' baseball team, his place was taken by John Balquist. Coakley coached many outstanding teams and players, one of whom was Lou Gehrig . . . Vermont has dropped hockey as a sport . . . Army's new basketball coach, Elmer Ripley, is no newcomer to the game, having spent 25 years coaching the sport at Georgetown, Yale, Columbia, Notre Dame and John Carroll . . . After 20 years of successful coaching, Jack McCarthy has turned over the football reins at Cathedral High of Boston to his assistant, Ernest Handy. McCarthy will continue to handle the baseball team. . . A. W. "Windy" Holmes, formerly equipment manager at Fresno, Calif., High School, has been named manager of athletics at Fresno State . . . When Syracuse and Fordham tangled this fall, two former teammates were pitted against each other. Ben Schwartzwalder and Fordham's backfield coach, "Eck" Allen, were teammates at West Virginia twenty years ago.



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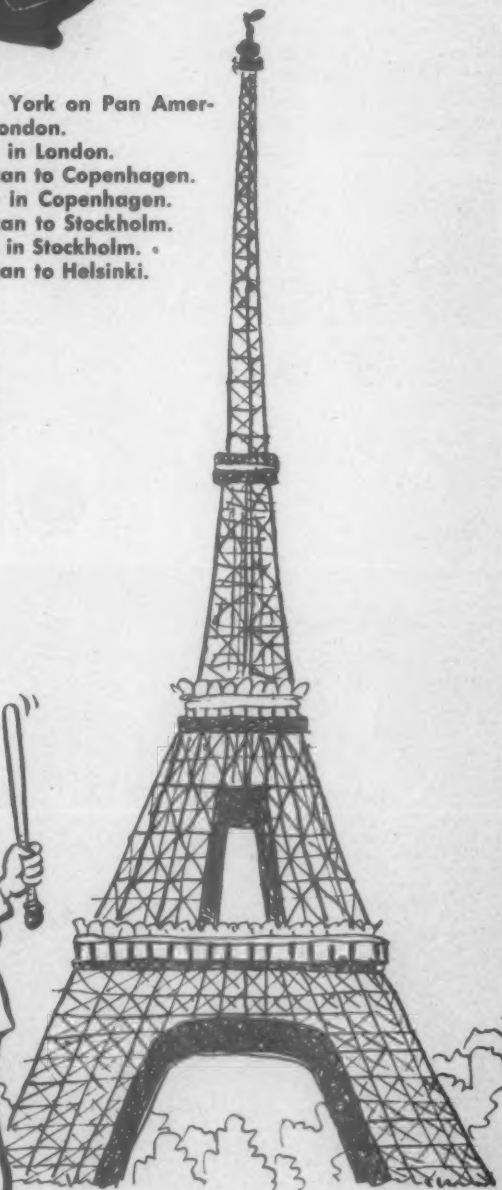


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- July 7-10. Sightseeing in London.
- July 11. Pan American to Copenhagen.
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Tulane's Pivot Continuity

By CLIFF WELLS

Basketball Coach, Tulane University

TULANE has been successful with its figure eight style of pivot play. Three continuities or setups are used. The setup is identified by the player on the pivot spot in the outside half of the free throw circle, when the player with the ball goes into action, or into the elbow of the free throw lane and free throw circle. The man on the post identifies the play. Patience and drill are necessary to develop the whole action. As the guards bring the ball down the court, the pivot player takes his place. We

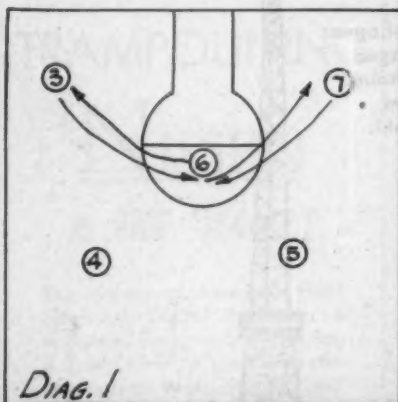
vary the attack by changing the pivot player each time the ball is brought down court when the defense has had a chance to set up.

O3, O6 and O7 are the forwards and center, and they move in figure eight motion as the guards, by a signal, move a man on the post to a corner to screen for the player coming out (Diagram 1). If O4 has the ball and gives the signal, then the post man goes to the opposite corner and that forward comes in. Whatever player is on the post, that is the play which is run as 3 play, 6 play and 7 play. Substitutes for the 3 play are numbers 13 and 23. The substitutes for 6 are 16 and 26, while the substitutes for 7 are 17 and 27, etc. Last season the signal we used to move a player off the post was to have the man with the ball hold it over his head.

When O6 is on the pivot and O4 and O5 pass to each other and split, then play 6 is run as shown in Diagram 2. O5 passes to O4 and crosses

over. O4 dribbles and passes to O7, who passes quickly back to O4, and cuts straight across the free throw circle, as is shown by the line. O6 moves off the post to the corner, and as O7 moves out of the spot on the side of the court, O6 meets the pass from O4 and passes to O5 who picks his guard off of O7. Quick passes and timing are very important in making this play work. O3 moves in a circle to keep his guard busy. (Series A run to opposite side.)

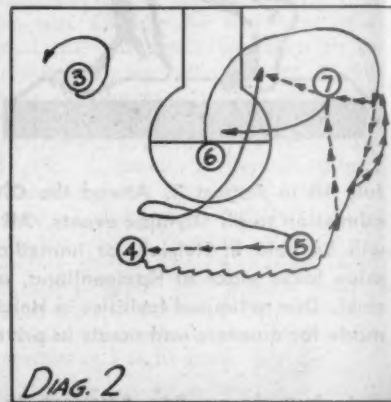
If the play does not work and O6



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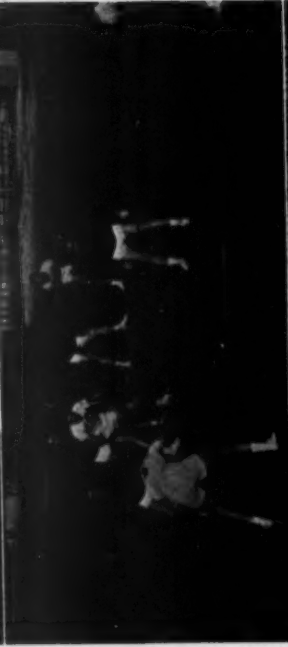
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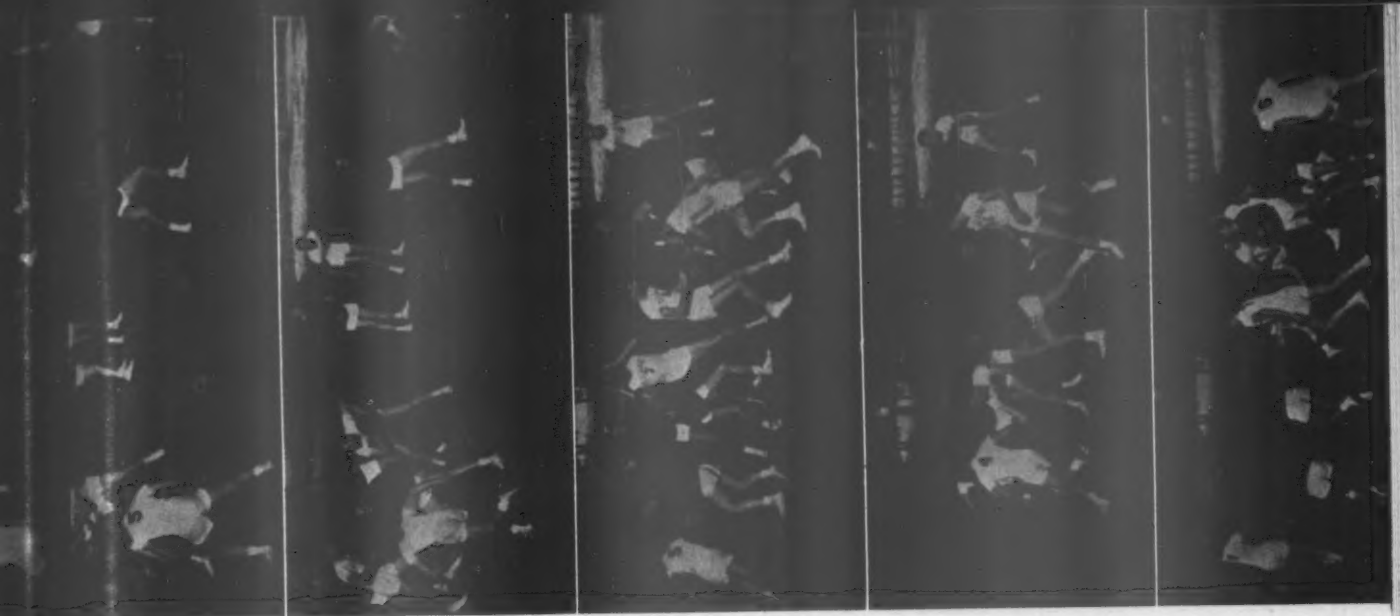


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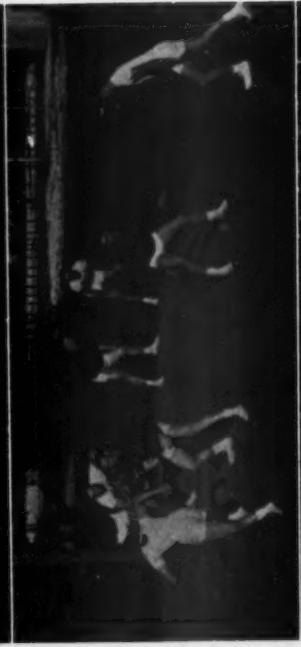




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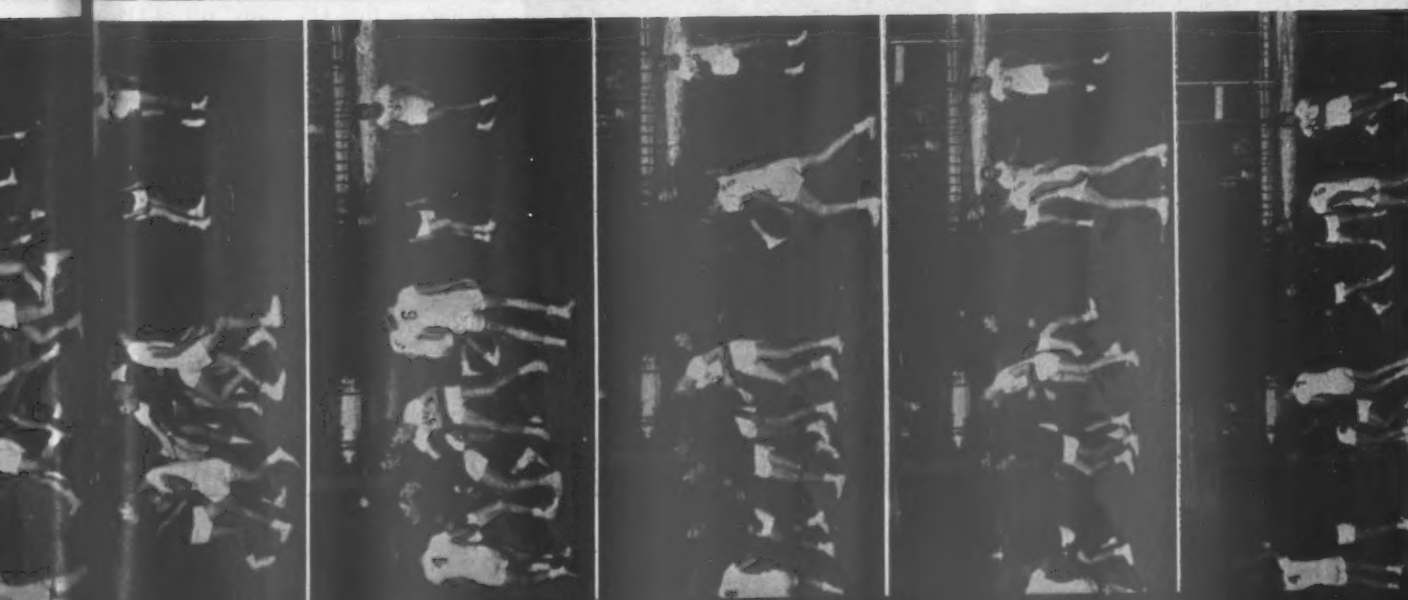
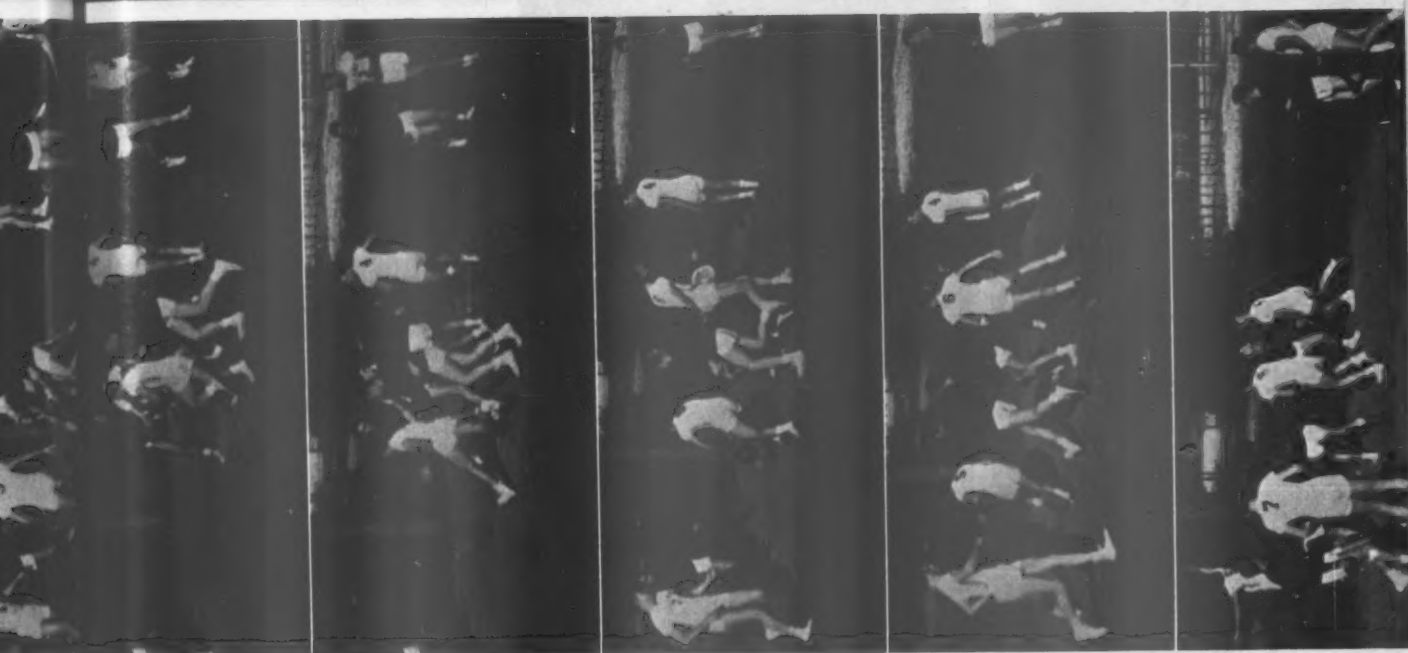
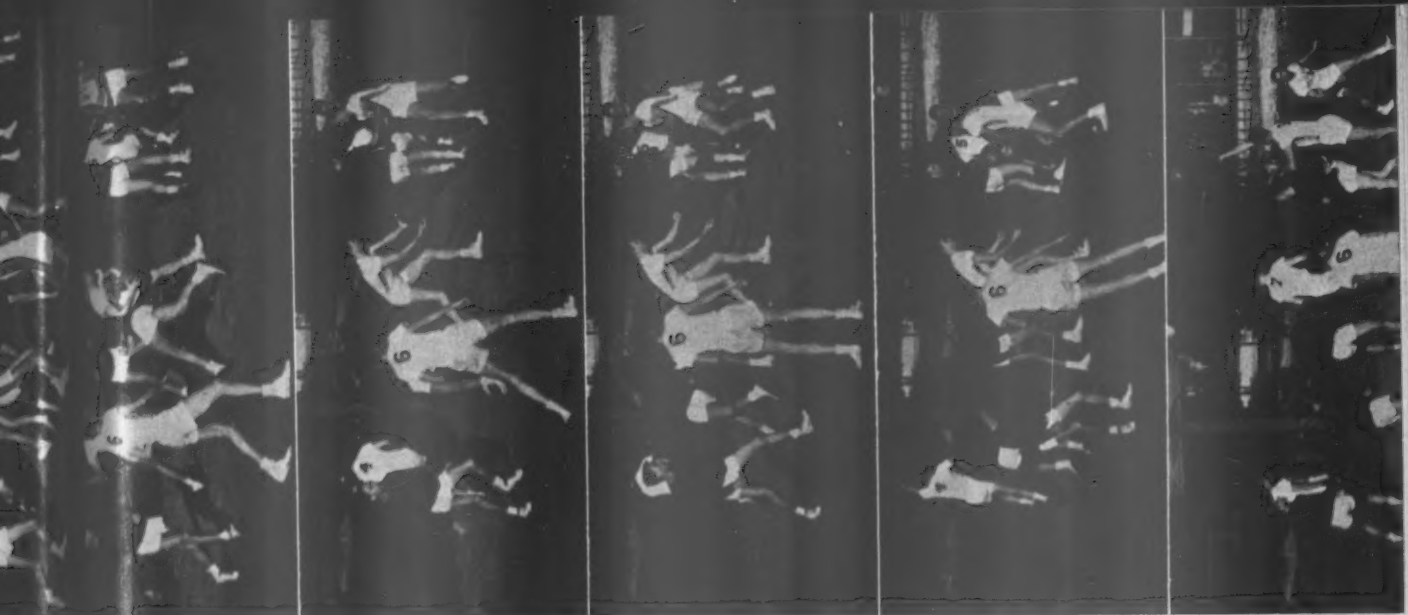


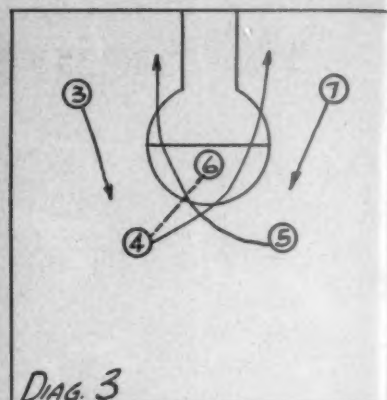
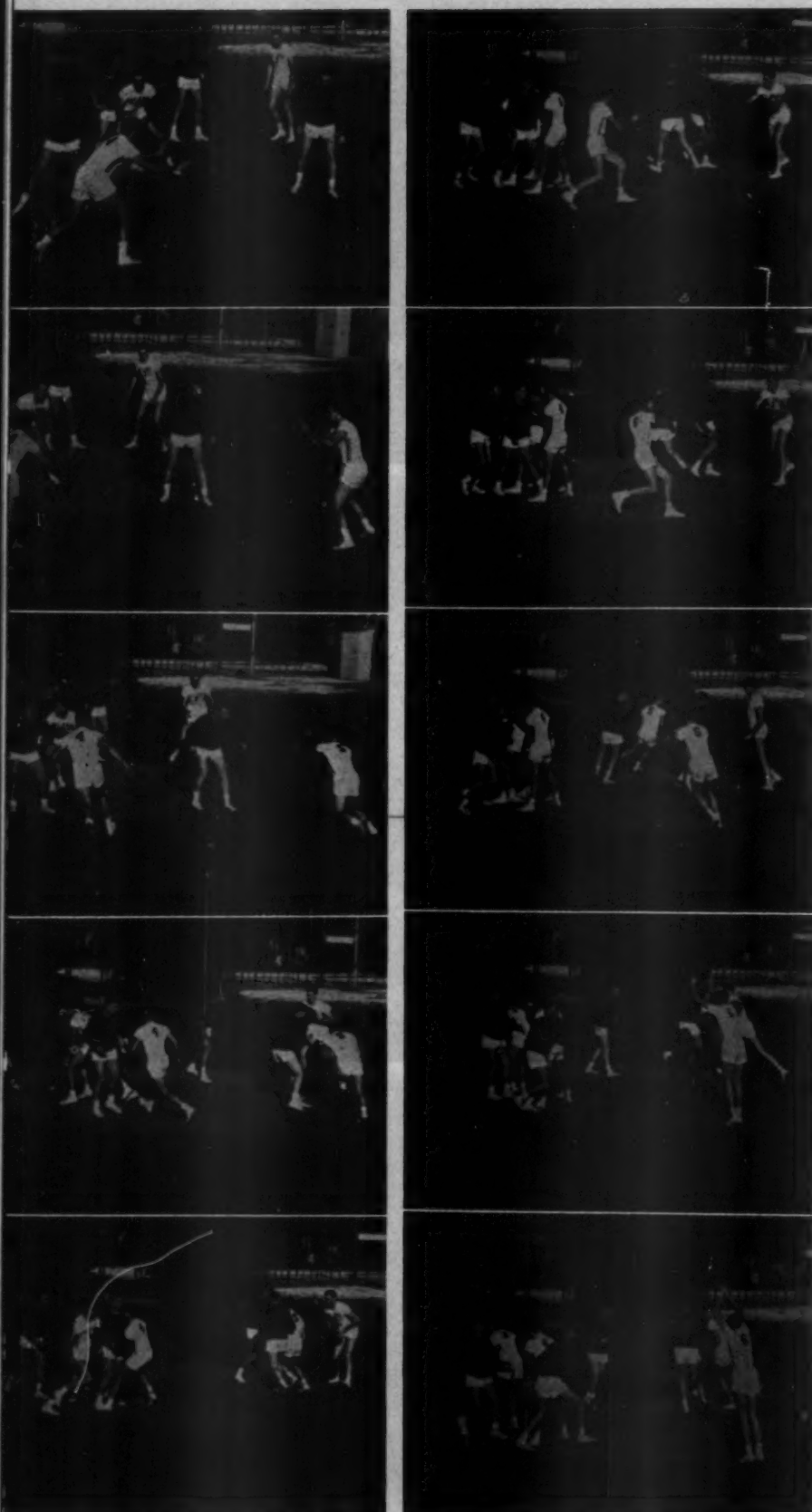
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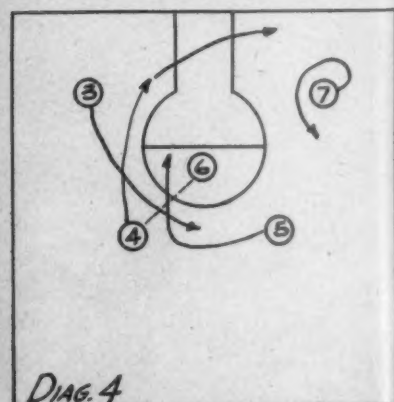


cannot pass into O5, he passes the ball out to O4, and O7 figure eight screens for O3, who moves in on the post, and play 3 is then set up. (Series B run to opposite side.)

CLIFF WELLS needs no introduction to the readers of this publication, having written his first article in 1931 when he was at Logansport, Indiana, High School. Since that time he has authored 28 articles for us. Wells had outstanding success as a high school coach and six years ago moved to Tulane as head coach. At the Louisiana school his teams won 99 out of 129 games for a percentage of .765. Wells is the founder and director of the 23 year old Indiana Basketball Coaching School.

Diagram 3 shows the first variation of play 6. When O4 is able to pass directly to O6, then O4 determines the screening or splitting by his cut. Therefore, in the first variation, O4 passes to O6, and cuts down the middle, so that O5 "tails" off of O4, and into the goal, as is indicated by

(Continued on page 30)



Winning Attacks

By JOHN E. SIPOS

R. L. Simpson High School, Huntington, L. I., New York

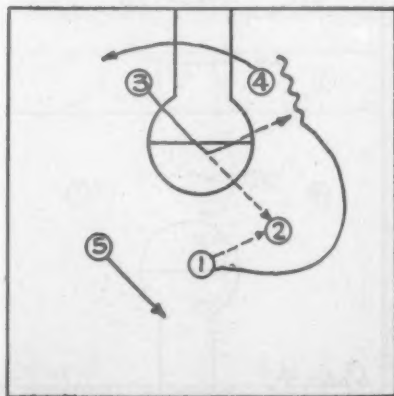
I had often said to myself, "What do other teams use?" Deciding to inquire about the best teams, which were naturally the state champions, to my amazement, I found I was using an offense and a defensive system very similar to the average teams that I surveyed. This information gave me more determination to continue coaching my style of basketball play, and through the survey I came to the conclusion that it was not I, as a coach, but that I must sell my system to the players. I presented the accumulated facts to my squads and they formed a different opinion of basketball. We contacted the coaches whose teams won state championships over a five-year period. This article is based on their views on attacking man-to-man and zone defenses.

Plays Against the Man-for-Man Defense

A number of coaches were asked what plays they used against the man-for-man defense. This question was asked to find out exactly what offense was used the most in a particular area, and then computed with the other five sections in the area that the survey covered. It was noted that approximately 44.4 per cent of the teams used the old "guard around" play with some variations. This was one form used by many teams.

In the play shown in Diagram 1, O1 passes to O2 and cuts outside of O2. O2 holds the ball until O1's defensive man is almost to O2, then O2 passes to O3 who has cut to the front half of the free throw circle to receive the pass from O2. O4 goes to

Diagram 1. Guard Around Play.



the opposite side of the court to clear a path for O1 under the basket for a shot, or O2 may get set and take a shot over O3's screen. O2 may dribble in for a lay-up shot if there is no switch. O5 comes out for defensive balance. This play could be used off of a single or double pivot offense.

Approximately 41.3 per cent of the teams used a scissors play of some sort; that is, either the play situation was from the side court or in and around the free throw circle.

O3 cuts to the front half of the free throw circle and receives a pass from O1 who cuts first. Then O5 cuts very close off of O1's back for a screen (Diagram 2). O3 tries to make the pass to O1, and if he is not open for a return pass, then O3 passes to O5 who either takes a shot at the free throw circle, or drives in for a lay-up shot under the basket. Generally, it will be found that O5 will be open. Therefore, it will be easier to pass to him than to O1.

Nine and five-tenths per cent of the teams used a block on the opposite side of the court from where the pass was made. This system was used chiefly in the Rocky Mountain section by the following state champions - Colorado 1945 and 1946; Nevada 1945; Montana 1946; Wyoming 1946 and Arizona 1945.

In Diagram 3, O1 passes to O5, and at the same time follows his pass and screens for O5. O5 dribbles toward the sideline and then passes to O2. O3 screens for O4, O4 cuts toward the basket and receives a pass from O2.

Eighty-five and seven-tenths per cent of the teams used the combination of

Diagram 2. Scissors Setup at the Foul Line.

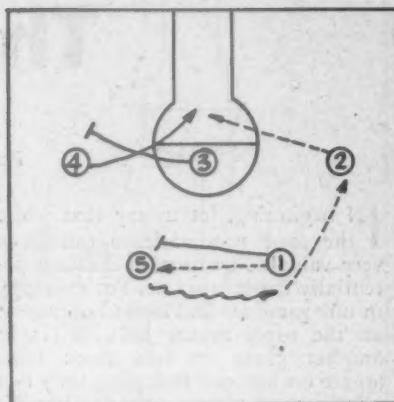
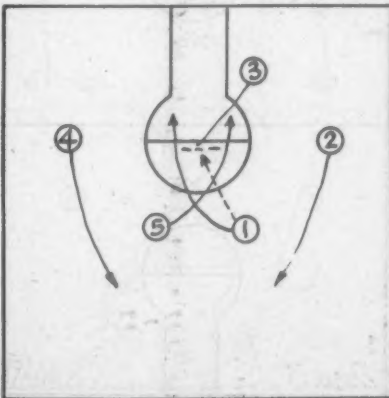


Diagram 3. Block on the Opposite Side.

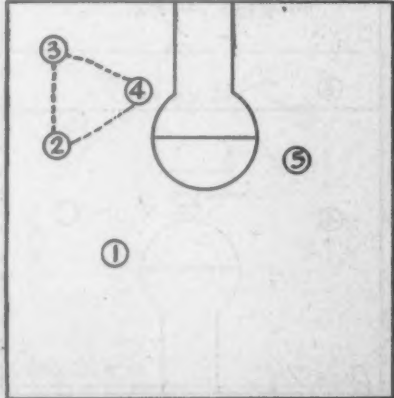
inside and outside screens. These consisted of rolling screens and stationary blocks. Some used five men moving, some the four-man wheel, and others used the three-man figure eight. Most plays used by these champions were executed on the move. Thirty-seven and eight-tenths per cent of the teams used a deliberate style of basketball, in which the offensive plays were started from a stationary position. In the Middle West, basketball was played as a two-man type of game; that is, the ball was passed to an individual, and the passer would screen off of the receiver's defensive man with a rolling or stationary screen. Basketball, on the whole, is played by two men, as mentioned before. Sometimes the third man is brought into play. Then the scissors play develops off this, and the third man is called the pivot man.

Plays Used Against the Zone Defense

This question dealt with the offensive maneuvers against the zone defense. The zone defense is greatly feared by many coaches. Against the zone defense, the main attack was to

(Continued on page 38)

Diagram 4. Overload to the Strong Side.



The Kinert Press

By HARRY KINERT

Basketball Coach, High School, Freeport, Illinois

IN beginning, let us say that while the zone press defense can be a very valuable weapon, it is also a potentially dangerous one. For example, in one game we had a good opponent on the ropes at the half, 40-17; in another game we had three fouls apiece on our two best men, only two minutes and twenty seconds after the start of the game.

The general setup is shown in Diagram 1. Numbers O1, O2, O3, O4 and O5 designate the offensive team, and the numbers X1, X2, X3, X4 and X5 signify the defensive team which is using a zone press. We allow the offensive team to pass the ball in bounds to O2 or to any man in a corresponding position, namely, a short pass in bounds. As soon as O2 receives the ball, as is shown in Diagram 2, X1 moves in on O2, waving his arms, and if O2 starts to dribble, X1 forces him to stop his dribble. X2 also attacks O2 and both X1 and X2 try to put the squeeze on him. X3 is the fastest man and becomes a floater to discourage a pass back to O1. X4 moves to the same side to which the ball is passed, to discourage a pass to O3. Although X4 may be only average in speed, he must be alert for any long pass and should be a gambler at heart. He must take chances on interceptions because a successful pass usually gives the opposition a two-on-one situation. X5 favors the side the ball is on.

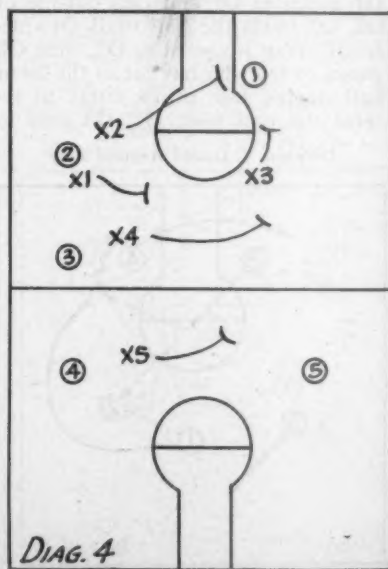
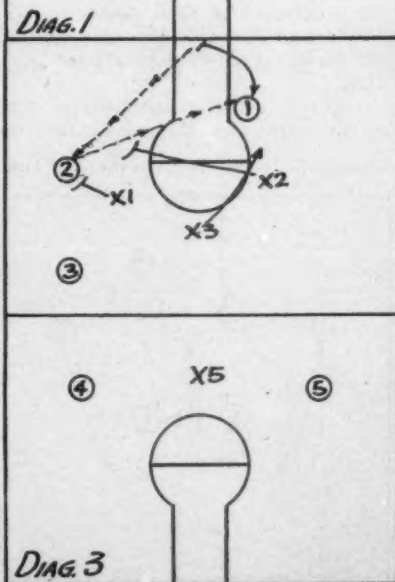
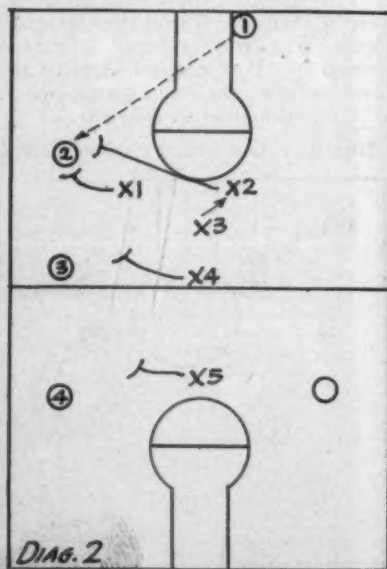
We realize that the reader has plenty of questions he would like to ask, but an examination of a few other basic principles of this defense may answer most of them. One of the most important requirements for the success of this defense is the ability of the players to *anticipate* the pass before it is thrown. We all know that successful anticipation is difficult, and to attempt to tell how to teach anticipation, is almost impossible. We reminded our players constantly that they should try to outguess their op-

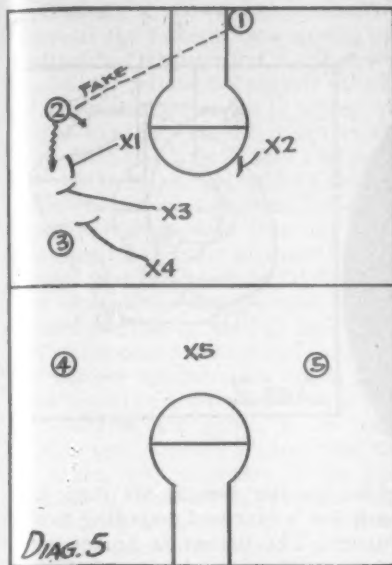
ponents, and practice this press as much as possible.

Probably the easiest pass for O2 to make is directly back to O1. If that pass takes place, Diagram 3 shows approximately the setup that will result. Diagram 4 indicates the way the team press should handle the situation. X3 is now responsible for attacking O1; X2, who is the inside man, rolls off and helps put the squeeze on O1; X1 takes X3's spot as the floater, while X4 tends to move to the side the ball is now on.

The zone press defense should not be abandoned after a brief test. Players will have a natural inclination to give up the defense if it does not work immediately. The first time we tried it, the opponents brought the ball up successfully the first six times. Our captain then called time out, and all the boys wanted to go back on defense. We told the players we were going to give the zone press a fair trial, even if it cost us the ball game. It was our feeling that this defense was basically sound and it could be made to work. The next six tries resulted in four interceptions for us, one jump ball, and only one successful crossing of the center line by our opponents.

Another value of the press, which is very important, is that the average team, after being under the pressure of the zone press, cannot slow down after they get the ball up the court.





They make absurd mistakes and their shooting will be far below par because of the extreme tenseness and anxiety, which the pressure has brought about.

We employed a standard routine for dealing with opponents who began to meet our press defense with some success. Let us assume that the opponents' coach has analyzed the zone press and has decided that the side lanes are its weak spots. His attack (Diagram 5) then would probably open with a pass into O2 who fakes X1 and starts his dribble down the right side of the court. X1, realizing he is stopped for the moment, tags along behind. X3, however, stops O2's dribble and with X1, who is in good position, puts the squeeze on O2. X2 holds his position and now becomes the floater. X4 moves in and stops a potential pass to O3 at all costs, because if O3 does get the ball, he is behind X4 in a three-on-one situation.

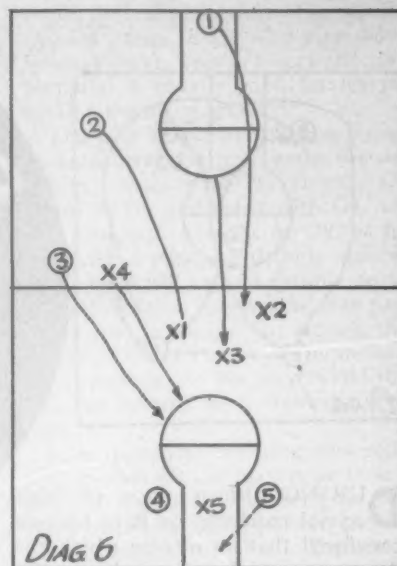
In coaching this type of defense, the team must be told that the offense is going to get from five to seven easy baskets per game. Then the players must be convinced that if the defense is working well, it should double that

HARRY KINERT earned eleven letters at Freeport High School and still holds the 100 yard dash record of 9.8 for the Big Eight Conference. After teaching at Keith Country Day School in Rockford he returned to Freeport in 1944, and for five seasons coached the frosh-soph team to an 88 and 21 record. Taking over the varsity, he compiled an even more outstanding record of 57 and 7 in two years. A year ago his team was defeated in the semi-finals by Mt. Vernon, and this past spring won the state title for the first time for Freeport since Adolph Rupp turned the trick twenty-five years ago.

number of points by interceptions and easy lay-ups.

In Diagram 6, the offense is beating the defense and scoring on an easy short shot. However, in Diagram 7, we see that all is not lost since we, the zone pressing team, have a beautiful fast break situation, providing X5 is alert. He jumps out of bounds with the ball and usually throws to X2, thus setting up a three-lane fast break. If X2 is covered, X5 throws to X1 and the same situation from the opposite side is set up.

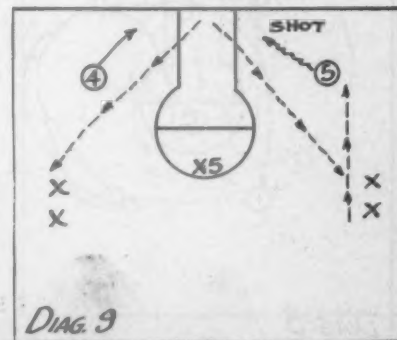
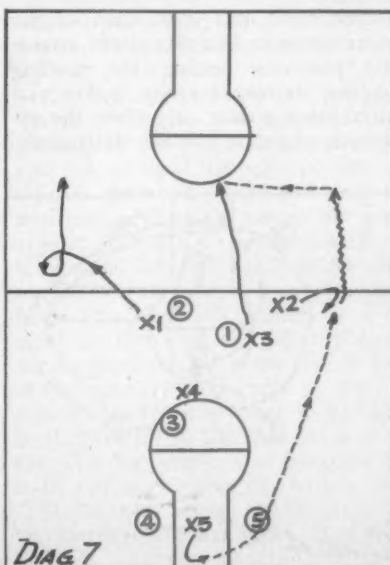
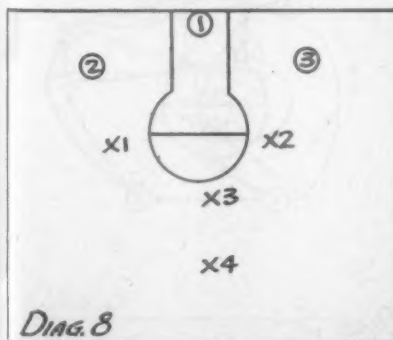
The pressing zone defense is approximately 50 per cent psychological. The first interception is by far the most important because the offensive player who made the bad pass or mistake will have a tendency to become conservative or to hesitate. As a result, this boy usually plays right into the hands of the team using the pressing

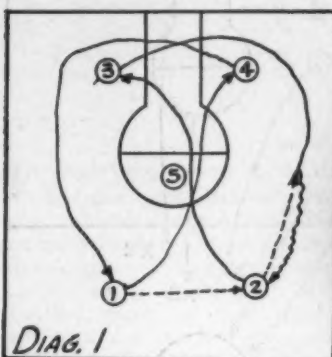


zone by giving these players more time to get into position. We take chances during the first quarter of the game, and once a player makes a mistake, passes to him are encouraged because we believe that he will be the logical boy to make the next mistake.

Practice sessions provide very poor conditions for judging how effective the zone press will be under game conditions. We have found that the best way to practice the zone press is to use only one-half of the floor, (Diagram 8), allowing four defensive players against three offensive players. The offensive players receive one point if they get the ball over the middle of the court successfully, and the defensive players receive two points for every time they stop the offensive team. Since the offensive team has complete freedom in getting the ball up the court, almost any situation that might occur in a game is encountered. In order to give X5 practice, we set up the situation shown in Diagram 9 and throw to either O4 or O5. After this throw, it is up to X5 to cover the crossed zone, get the ball

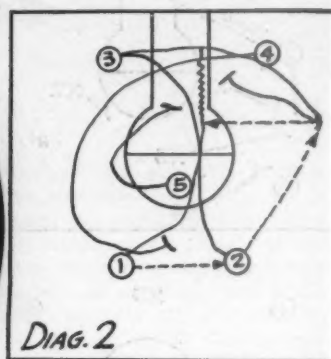
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REVOLVING OFFENSE

By
D. W. JAMESON
Basketball Coach
Shawnee, Okla., H. S.



DURING fifteen years of high school coaching, we have become convinced that an offense which fits the personnel of the squad must be used. A simple offense to be used against different types of defense should also be learned. The offense must be changed as soon as the defense changes. In the state tournament this year, we used three different offenses to meet three different defenses, and each was equally well played. If this is to be done, the offenses should be simple to use and the players must have a great deal of experience.

Experience may be gained by requiring all sophomores to play on the B team for one year. This means the players are playing instead of "riding the bench." These boys provide a coach with a team of experienced players who have been under pressure.

A successful team must also be able to meet any type of offense with an effective defense. There are several simple types of defenses that may be used, and it is easy to develop three or four defenses with similar principles which will take care of most of the offenses encountered. This

makes scouting less effective for the opponents.

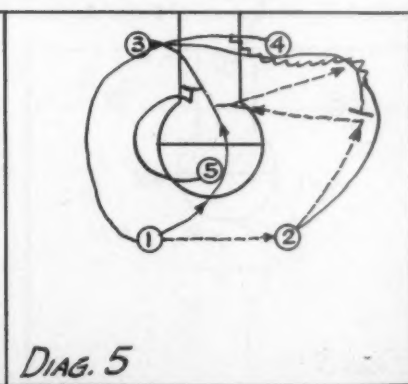
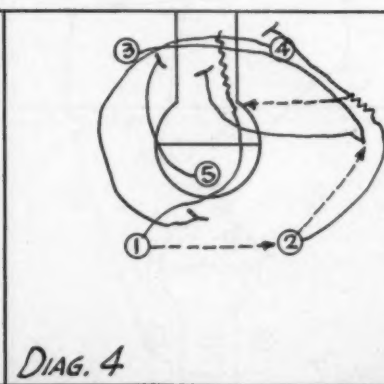
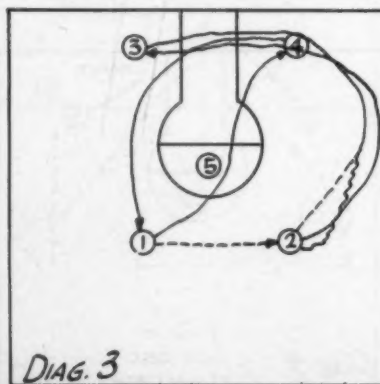
It is necessary to concentrate on the particular offense and defense to be used against the next opponent, but each offense and defense should be reviewed in every practice. These different types help keep the players from becoming stale.

We will attempt to give one of the revolving offensive patterns which we found to be simple and effective against most man-for-man defenses. In 19 of 27 games last season, we scored from 40 to 45 points, and were 40 points or above in 23 of 27 games. This shows the consistency of the pattern. This pattern was used in a majority of the games, but was changed as the defense became effective against it.

The basic idea is to keep all the players moving in a set pattern, changing positions, setting up running screens, driving for the basket and attempting a shot only when the opponent makes a mistake defensively.

Many passing options are used, but each one is executed according to the pattern. The pattern is broken only when a defensive mistake occurs and a try for a basket is made. In all cases, when a shot is attempted, three players are in rebound positions and a safety position is maintained against a fast break by the opponents.

The basic pattern is shown in Diagram 1. O3 and O4 cross under the basket to pick up a screen, or force checking by the opponents, then drive around the outside to positions 1 and 2. O1 and O2 may also cross out in front for a screen and either O1 or O2 may pass to O3 or O4. They both cut by the post man and down the lane. O2 goes to the position held by O3 and O1 goes to O4's former position. Either O3 or O4, depending on which one receives the pass, dribbles to the position held by either O1 or O2. Without hesitating, the movements are repeated. This pattern is continued until a scoring opportunity occurs. The players in the 1 and 2 positions must alternate passes to each side, and may split the post as they drive in toward the basket. The post man acts as a screen and is ready



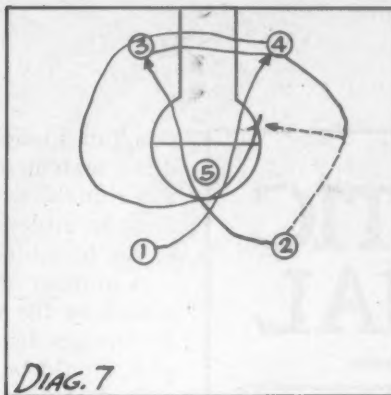
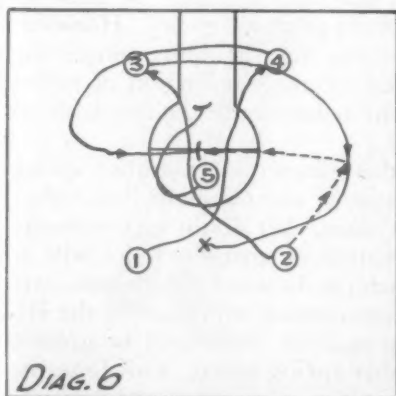
for a pass in case of an emergency.

Diagram 2 shows a very effective play off the pattern for a scoring opportunity. O2 passes to O3 and drives by O5. O1 follows O2 slightly outside of O2 and close to O5 to screen off the defense of O1. O3 passes to O1 who dribbles in for a shot and takes the rebound position held by O4. O2 takes the rebound position 3 and O5 spins out of position into any open position for a pass, in case O5's defensive man checks off on O1. O5 does not receive the pass; he takes the rebound position in front of the basket. O4 comes out to the head of the circle for defense against a fast break. This play usually accounts for several baskets during the game. If an open shot is not obtained, a shot must not be taken, but possession of the ball should be maintained. Players then fall into position and the revolving pattern should be continued.

The play shown in Diagram 3 is used by O2 instead of O1. In this option, O2 goes around the outside of O3. Otherwise, the movements are the same as shown in Diagram 1. In order to confuse the defense, it is well to use the plays shown in Diagrams 1 and 2 around both the left and right sides.

The play shown in Diagram 4 may be used off the one shown in Diagram 3 for a scoring opportunity. O2 passes to O3 and drives around outside of O3 who hands the ball back to O2. Now O2 takes a dribble around O3 and passes to O1 who is following the pattern by going around O5 and down the lane. O2 then goes to rebound position 4. O3 goes to the front of the basket for a rebound, and O5 again goes into any opening on the opposite side for a pass or to position 3 for a rebound. O4 comes out to the head of the circle for defense against a fast break.

The play shown in Diagram 5 is



a very effective option off the play shown in Diagram 3. In this option, O2 passes to O3 and goes around O3. O3 passes to O1 who has used O5 for a screen. Then O1 passes to O2 as he drives around O3. O2 may dribble in for a shot or return the

FOR fifteen years D. W. Jameson has been coaching high school basketball in Oklahoma, winning 80 per cent of the games his teams played. After one year at Southwest Tech in Weatherford, he moved to Cyril where in eleven years he won the tough Washita Valley Championship five times. Four years ago he moved to Shawnee. In 1949 Shawnee was defeated in the semi-finals and this past March won the Oklahoma championship.

pass to O1 or O5 whichever one is open. O3 takes position 4. O1 goes to the position of O3 and O5 takes his position for a rebound in front of the basket. Then O4 comes out for safety against a fast break.

A very effective option off the play shown in Diagram 1 is shown in Diagram 6. In this play, O2 passes to O3 and goes around the opposite side of O5. O1 splits off of O5 and goes to position 4. Then O5 swings out and around in front of the basket for a screen and rebounding. Now O4 cuts in near the free throw line for a pass from O3. This will usually give a good set shot and the other players are in position for rebounds. If O4 is not open, he may come on out to position 1. O3 may elect to dribble to the free throw line and shoot over O4 who has stopped at position 5, if he did not receive the ball.

In the play shown in Diagram 7, O2 passes to O3 and splits off of O5.

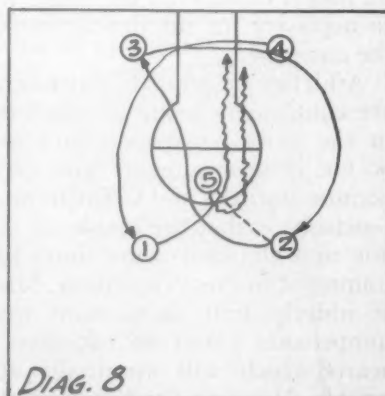
O1 also splits off of O5. Then O4 comes around and follows O1 around O5. O3 passes to O4 who may drive for the basket. This is a very effective play and is usually good for several baskets during a game.

The play shown in Diagram 8 may be used occasionally to make the defensive center play O5 closely. O2 passes to O5 and splits with O1. O5 may pass either to O1 or O2, or he may fake a pass and dribble around O1 as he drives by and dribble on in himself. If O5 is covered, he may pass to O3 who is driving out around the outside. This will break the monotony of the pattern; yet the players and the ball are moving in a well-organized plan.

It is necessary, in using this style offense, that all the players be in top physical condition and keep on the move constantly. The pattern should not be broken too often. Possession of the ball should be retained until a player is absolutely open for a scoring opportunity. Players must use good judgment as to when to break pattern for a play. Possession of the ball must be stressed at all times. As a rule, the boys have a tendency to break the pattern and try for a basket too often. This is not desirable because the opponents do not have to work very hard to keep the offense covered. The team in possession of the ball should keep and work a revolving pattern until the defense makes a mistake, then drive in for a shot. It is necessary to obtain rebounding positions on all shots. This helps keep possession of the ball if a shot is missed. All players coming around the post must drive hard for a basket.

It will be noticed that most of the plays call for close shots under the basket. If the boys do not become anxious to shoot, the team will finally get these shots. If the defense tries

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Publisher

Airing the Linen in Public

THE past football season brought forth numerous accusations of illegal play, overemphasis and illegal subsidization. In fact, we can't recall a season that has seen the sport pages so cluttered with this type of news.

We think it is too bad. It is bad enough in ordinary times, but certainly at this time when amateur sports are under critical surveillance by the general public, it is decidedly poor taste.

The basketball fixes left certain segments of the population with a feeling of repugnance toward amateur athletics. The West Point and William and Mary scandals served to heighten this feeling. Now we have the accusations of dirty play and subsidization. Is it little wonder that amateur sports are no longer considered the clean, wholesome activity so necessary for the development of the youth of the country?

Athletics in general, and football in particular, are continually being attacked in health columns in the daily newspapers and general magazines. So far, these arguments have carried little weight because statistics and scientific studies have proved conclusively that the incidence of injury or death, due to athletics is many times less than those encountered in every day living. Many of these critics of athletics state, in so many words, that athletic competition places an excessive strain on young hearts which will eventually account for heart trouble. However, studies have proved there is no appreciable difference one way or another between athletes and non-athletes who have died due to a heart condition.

The unfortunate thing, as we see it, is when a

coach or a school accuses another school of playing dirty. Statements of this type coming from the very individuals, who by the nature of their work believe in athletics, seem to substantiate what some of the health columnists have so long been saying.

A number of conferences prohibit their member schools or the staffs thereof from making any public charges against other member schools. This is as it should be.

Dud DeGroot, and his Committee on Ethics of the American Football Coaches Association, prepared an interesting report for the members of the Association. Among other things the report says: "To criticize or condemn an official, an opponent or a fellow coach is the surest way to make the headlines. A careful blending of sincerity and praise may not make the headlines. But they will surely avoid trouble and in the long run will promote the best interests of the game."

The report goes on to say, "Today, more than ever before in history, we have an opportunity to influence and mould American behavior. What kind of a job we do will play no small part in preparing our people for whatever lies ahead. Physical strength, as well as strength of character, are always prime requisites in national security. It is essential that we make good our claims that football produces these qualities."

We agree that the linen should not be aired in public, and the time spent by some individuals and institutions in criticizing others could better be spent in boosting athletics and the great game of football.

Spring Football Practice— A Cause of Overemphasis?

THERE is a growing move to do away with spring football practice. This may or may not be proper. We are not prepared to say. However, we do have some very definite ideas concerning the reason advanced for the elimination of spring football, namely, the reduction of the emphasis on the sport.

As we stated in this column in September, spring football is not a cause of overemphasis, but rather a by-product of the same. We doubt very seriously whether the elimination of spring practice will in any way save a coach's scalp when the alumni start howling. We further question whether, by the elimination of spring practice, there will be greater participation in other spring sports. This latter is, of course, dependent upon the athletic administration of a particular school. The number of football names that appear in track programs, and the number of individuals winning ten to twelve let-

(Continued on page 47)

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Applying the Full Court Press

By STAN WARD

Director of Athletics, Suffield Academy, Suffield, Connecticut

UNQUESTIONABLY the use of the full court press has been gaining rapidly in popularity in recent years, and now is an essential part of practically every basketball team's strategic arsenal. We have used it at Suffield Academy, in varying degrees, with a great deal of success over the past two years, and are convinced it is a vital offensive, defensive, and psychological weapon if taught and used properly. Then too, it is an intriguing field for the basketball strategist and theorist; for where to apply it, when to apply it, and how to apply it are interesting questions.

We have used the press in a number of ways—continuously for a full game; alternating it with either a retreating man-for-man or zone defense; pressing hard at the start of the game and then applying it at irregular intervals; or saving it until late in the game to apply if a game-winning rally is needed. We have even experimented briefly with a half-court press to be suddenly *slapped on* as the offense moves the ball across the center line but abandoned the idea temporarily because of lack of time.

The full court press certainly seems to be the answer to many of the coach's problems, since it may be used with practically every type of material; although naturally quick, aggressive boys make better press men. Considering the above, one of our more successful press teams was last year's squad which was basically slow, and because of their physical limitations, a poor defensive team. Yet, the resulting increase in offensive punch, and the natural stimulating of aggressiveness enabled us to be successful in nearly every instance.

If applied properly, the full court press can be very upsetting to a ball-control club, and is often used by coaches to chill fast-breaking teams before they can get their break underway. Against a team that handles the ball poorly, is poorly coached, or tends to get excited easily, and throws the desperation pass, it should always work well.

Psychologically it has advantages over the other types of defense since the players, once they are in condition, invariably like the press and have confidence in it. We also like to use it when we fear a let-down be-

cause we are playing what seems to be a weaker opponent. Too many times a team has gone into a game expecting a walk-away and then, finding it difficult to hit the hoop, has tightened up and has been upset. Using the press in this situation gets the boys on their toes, and keeps their minds on getting the ball, so that seldom do they freeze as they might if they were playing a more deliberate game.

The press does have certain disadvantages, and in order to apply it for any length of time, some depth in well-conditioned personnel is needed. It also, because the obtaining of the ball must be continually stressed, provides an opportunity for the forma-

STAN WARD is now serving his sixth year at Suffield Academy where his teams have compiled an 83 and 13 record and have won two New England Prep School Championships. Ward is co-publisher with Hugh Greer, basketball coach at the University of Connecticut, of the "Hugh Stan Manual of Basketball Statistics."

tion of poor defensive habits which are carried over to the orthodox forms of man-to-man defense. Watching the ball instead of the man, and a tendency to foul more frequently than usual because of over-eagerness, are two of the more common faults which must be guarded against constantly. Teaching the players the differences in the fundamental concepts of each defense will help immeasurably but it will be a never-ending struggle to insure that the boys use them in their proper place.

While pressing, we use an aggressive switching man-to-man; that is, whenever two offensive players cross, the defense will switch assignments and take up a half step. We begin work on the switching from our very first drill, which is simply a three-on-three situation deep in the back court, with the opposition trying to take the ball out of bounds and attempting to bring it up court. Besides switching, we concentrate on the defensive angle and hurrying the passer. Later we add four more men to complete

the teams, create game situations and begin to stress the vertical switch.

When the ball is being thrown in bounds we press the passer as closely as possible and try to confuse him into hurrying his pass. The moment the ball passes the defensive man, he drops back quickly to help out in case of a shallow cut. In the back court situation, our defensive angle is one of calculated risk, since we cheat heavily to the inside to avail ourselves of every chance for the ball. It is difficult to set an exact angle since each player, because of natural ability, will be able to assume a slightly different position, and we find the average player generally makes his own compensation on position. As the ball moves up the floor and reaches the danger zone, the angle will grow more conservative.

Our two deepest or back men, we hesitate to call them guards in this game of ever-changing situations, play a trifle more to the inside and deeper than in many press systems. These players are then still in a position to pick off the long pass, while at the same time they have a better view of the entire situation. Thus, they are able to switch vertically on any man breaking up the floor.

In the vertical switch, our deep men are constantly alert for cutters who are well ahead of their men, and in such a situation they will switch assignments by dropping off and picking up the front man. The original defensive man who was lagging behind also switches and picks up the back man. We work on this constantly; otherwise teams that can break a man loose will break the press quickly and effectively.

Also, from the beginning we encourage the boys to talk. Any team that does not talk while pressing will be a poor press unit, with missed switches and assignments. Heads up, aggressive team play is necessary at all times in the press, since one man who is not doing his job will spoil the entire effort. There is no place in this system for the lazy ball player who is not on his toes, does not talk, and likes to *sandbag*.

In our system, we pick up according to rotation or position, depending upon the type of defense the opposi-

(Continued on page 45)

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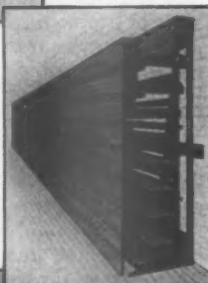
TOP: "Two Level" installation utilizes balcony for extra seating. INSET: Shows "recovered" balcony and main floor areas for regular use



LEFT: High-Row type safely accommodates extra large groups.



RIGHT: Wall or Movable types "nest" in $32\frac{1}{2}$ " Walls don't support load.



BELOW: Movable units can be easily and quickly moved by 1 or 2 persons.



The Knee is a Vulnerable Joint

By FRED E. HOWELL

Athletic Director, Wesley Jr. College, Dover, Del.

THE knee is a poor mechanism and is the joint most likely to be injured. It is also a weight-bearing joint, which makes the knee injury more important and the treatment and correction more difficult, thus providing a continual problem for physical educators and coaches.

Studies have pointed out that more severe injuries occur in football, and the leg and foot area account for approximately 43 per cent of all injuries, with the knee and ankle being the parts injured most frequently. Of significant importance to the football coaches, should be the revelation that more serious injuries occur when a player is blocked or tackled than when he executes a tackle or block. Evidently more emphasis should be placed on the blocking and tackling drills, better equipment should be used and live tackling eliminated in favor of the dummy.

All weak knees should be taped and considerable time should be given to warming-up exercises and drills before the start of a game. It is conceded that there is less chance of injury when an athlete is warmed-up and the muscles, tendons and ligaments have been subjected to exercises beyond those gained through ordinary activity. We attribute this decrease in knee injuries to the daily use of leg and back stretching exercises. This should apply to all sports as well as to football. These exercises are numerous and should be used daily, but only after the athlete has had some warm-up, such as jogging around the track, basketball court or football field. Many athletes carry troublesome *trick* knees as the result of clipping, turning and twisting, improper care, or playing too soon after an injury.

When an injury does occur we try to obtain a detailed description of the manner of its occurrence. The reason for this is that we try and differentiate between injuries to the ligaments (sprains) and the muscles, tendons and bursae. If there is no history of a twist, crunching of ligaments, weakness in the joints, tenderness at the tibial insertion of internal ligaments, or locking of the joints, the possibility of knee sprain may be disregarded until further evidence is obtained.

Further evidence may be obtained by palpating to determine the points or point of tenderness; swelling

usually will not be evident at the time of this early diagnosis. After the examination by palpation, tests should be made for abnormal mobility, both in the lateral and anteroposterior planes. A normal leg should be used for purposes of comparison when trying to detect abnormal mobility. The patient should relax the muscles of his thigh completely. On the following day another diagnosis should be made to verify the first diagnosis, and to detect any new signs of reaction.

When any doubt exists regarding the diagnosis, it is well to x-ray the joint before allowing the patient to walk, or before beginning any therapy other than rest and hot or cold applications. It may be well to remember that in diagnosing injuries to the knee, statistics show that injuries to the structure on the inner side of the knee far exceed those to any other part.

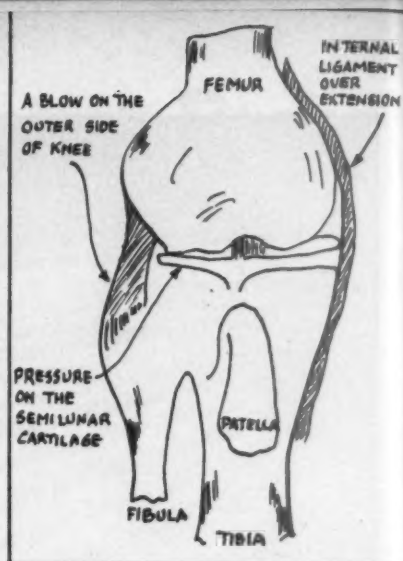
Of the 653 recorded knee injuries, the following table presents the order of frequency and the distribution of these injuries as to type.¹

Knee Injuries

Ligament sprains (meniscus)	320
Muscle contusions	84
Joint contusions	171
Lacerations and abrasions	20
Infrapatellar bursitis	11
Superficial contusions	12
Infected abrasions or furuncles	8
Dislocations	10
Miscellaneous	17

Total 653

The lateral ligaments and the semilunar cartilages are frequently involved, as shown in the table. We will emphasize briefly these two. When the foot is everted, the leg abducted and partially flexed at the knee, any force applied against the outside of the leg may result in a ligamentous tear or cartilaginous injury. Sometimes a sprain fracture occurs if the



ligament in being torn from its point insertion has detached a small fragment of bone.

Such injuries occur frequently in football when a player is tackled from the side while supporting the weight of his body on one leg, or when another player falls on his partially extended leg when he is in the act of rising, but has one knee still on the ground. Pain is prominent on the inner side and is exaggerated when the foot is twisted outward. Treatment should consist of rest in bed, cold applications should be used and after this ice treatment, heat should be applied by means of an infra-red lamp or diathermy machine. After the leg has been thoroughly heated, it should be massaged, using deep strokes above and below the injured part.

On the fourth day after injury, the patient is usually given crutches and an elastic bandage is placed around the joint. He is instructed to contract his muscles as much as possible and flex the joint through a limited range several times during the day. The treatment should also consist of the application of a splint, and the patient should walk with his toes turned in to reduce the strain on this ligament. In some instances, a wedge can be placed under the inner border of the heel to throw the weight on the outside of the foot.

Oftentimes, due to the heavy blow, or to the strain which is being thrown on the joint, there is a sudden buckling of the knee and the injured person falls to the ground. When he

¹Thorndike, Augustus, *Athletic Injuries* (Prevention, Diagnosis and Treatment). Lea and Febiger, Philadelphia, 1942.

(Continued on page 41)

FRED HOWELL graduated from Springfield College where he competed in varsity sports. Following graduation, he studied for and received his master's degree at Columbia. In addition to his duties as athletic director, he coaches the baseball, basketball and soccer teams at Wesley Junior College.

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THIS study was made to determine:

1. The types of offenses and defenses used most in the consolidated, minor accredited and fully accredited high schools in North Dakota.

2. The relationship of the types of offensive and defensive play to the seasonal, conference and tournament rank.

3. The relative evaluation of certain fundamental skills used in basketball.

4. The relative evaluation, with reference to practices regarding controversial issues, such as the use of conditioning exercises, charts, length of practice sessions and interscholastic competition at certain grade levels.

The problem of this research was to obtain information on the types of offenses and defenses used; to make a general comparison on the effectiveness of each, and to determine the policies and attitudes toward the controversial issues of basketball.

The major portion of the data used in this study was taken from questionnaires sent to 241 high school basketball coaches in North Dakota.

The study was based on the total of 160 questionnaires. This was 66.4 per cent of the 241 mailed.

The different types of defenses were divided into the following three types: the man-to-man, zone, and combination man-to-man and zone defense. Teams were grouped into four categories: (a) teams winning 75 per cent or more games, (b) teams winning 50 per cent or more games, (c) teams winning 25 per cent or more games, and (d) teams winning less than 25 per cent of their games. The seasonal records were compared with the types of defenses used, and classified into one of four groups of teams, determined by their won and lost record.

Table I

Total Number and Types of Defenses Used by High School Coaches from 1945-1950

Per cent of Games Won	Man-to-Man No.	Man-to-Man Per Cent	Zone No.	Zone Per Cent	Combination No.	Combination Per Cent	Total No.	Total Per Cent
75 per cent or more	61	41	27	17	42	42	130	100
50 per cent or more	94	44	42	20	78	36	214	100
25 per cent or more	53	45	17	15	47	40	117	100
Less than 25 per cent	13	62	5	20	7	28	25	100
Total	221	46	91	18	174	36	486	100

Considering comparisons on a percentage basis, the combination defense had the best record, the zone defense

Basketball Trends in North Dakota

By LEON LANDE

Basketball Coach, Fargo, North Dakota, High School

was second, and the man-to-man last. The difference, however, was not great enough to prove conclusively the strength or weakness of each defense.

The trend in the five-year period seemed to indicate the use of more combination defenses, less man-to-man defenses, while the number of zone defenses remained quite constant.

The two main types of offense considered were: the fast break and slow set offense. Coaches were evenly divided on the types of offense or offenses used during this five-year period (1945-1950). There was a slight trend towards the use of more fast break offenses.

Table II
Comparison of the Effectiveness of the Fast Break and Slow Set Offense Between 1945-1950

Number of Games Won	Fast Break No.	Fast Break Per Cent	Slow Set No.	Slow Set Per Cent	Total No.	Total Per Cent
75 per cent or more	75	49	77	51	152	100
50 per cent or more	124	52	115	48	239	100
25 per cent or more	63	50	64	50	127	100
Less than 25 per cent	8	36	17	64	25	100
Total	270	47	273	53	543	100

In comparing the won and lost records of the teams using the fast break, the percentages indicate a very slight advantage for the fast break offense.

Almost all the coaches favored the use of varied offensive attacks to meet changing defenses. The majority of the coaches were for the use of set plays on jump ball situations, and against the use of regular team offense for the same purpose.

Further study was made in regard to the comparison of seasonal records with tournament records. The types of tournaments used in all classes of schools, namely; the A, B, and C were included. Tournaments considered included the county, sub-district, district, regional, divisional, state and invitational. The teams with better seasonal records, as a whole, varied less in tournament rank than teams with poorer records. Teams winning

less than 50 per cent of their games seldom had the opportunity to compete in regional, divisional, and state basketball tournaments. The teams winning 75 per cent or more games during the season had the same variation in rank as the teams winning 50 per cent and up to 75 per cent of the games in regional, divisional, and state tournaments.

Ten fundamental techniques in basketball were rated by the coaches according to importance. The comparison in Table III shows the order in which the fundamental skills were weighted according to the following method: the rank number of 1 was given a weighting of 9 etc., down to the rank of 10 which was given a weighting of 1. For example, 87 ranked catching and passing number 1. This number multiplied by 10 would equal 870; since passing and catching were ranked second by 47 it would mean that 47 would be multiplied by 9 which would equal 423. This process was used for each number from rank 1 through 10. The total for passing and catching, when using this method, was 1466.

Table III Rank Order of Fundamental Skills According to Importance.		
Fundamentals	Rank	Weighted Score
Catching and passing	1	1466
Shooting	2	1349
Rebounding	3	996
Individual defense	4	943
Dribbling	5	833
Pivoting	6	821
Cutting	7	750
Feinting	8	702
Screening	9	609
Jumping practice	10	496

Ten different types of passes were rated according to importance and use to the coaches. A weighting scale,

Continued on page 44)

LEON LANDE completed work for his master's degree at the University of North Dakota in 1950. His thesis was a comprehensive study on high school basketball in his state. This interesting article is a summation of some of his findings. Lande has had a highly successful coaching career, winning two successive state Class B Championships while at Minot, and the last two years guided his Fargo team to two Eastern Division Championships.



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Teaching Tumbling and Gymnastics

By OTTO E. RYSER

Gymnastics Coach, Indiana University

IN a recent article, *A Brief for Tumbling and Apparatus Work*, published in the February issue of the *Athletic Journal*, the author stated that one of the reasons frequently advanced to justify the omitting of tumbling and apparatus work from the public school physical education program was the fact that the work was too formal. "Therefore," the objectors say, "that type of work does not belong in a modern program based on the modern philosophy of physical education." The author contended this need not be so; because it is not an *activity* that is formal or informal, but it is the *method* used in presenting the activity that makes it one or the other.

In the light of this assertion, this article will discuss teaching methods in an attempt to show that this worthwhile activity can be presented in a much less formal manner than that which has given it the widely accepted reputation of being formal. Learning to tumble and to work on the apparatus can and should be enjoyable and full of fun for both the participants and for those doing the teaching.

The credit for the success or the blame for failure in teaching any activity should go, of course, to the teacher. A teacher's success and effectiveness is dependent quite as much on the methods he uses in teaching as it is on his knowledge of the work and his skill in performing.

To begin, the idea of exercising for the sake of exercise must not be countenanced. The former idea of teaching mere positions and movements on the apparatus must be replaced with that of presenting interesting, challenging stunts that serve as self-competition as well as competition with others. Standing in line taking turns, and paying attention while instruction is being given should be encouraged, but the students need not stand at attention, nor should normal talking be discouraged during the time when no instruction is being given.

When instruction is begun, good form, straight legs, pointed toes, etc., should be incidental. The successful achievement of the stunt should be the principal aim. In planning his lesson, the instructor must keep in mind that the boys should be able to succeed in the performance of their first few stunts. If this principle is followed, it will be easier to secure the interest of the students, since it

is a well-known fact that an individual likes to do something he is able to do well. Once his interest has been aroused, a few failures will serve to increase his determination to succeed.

There are, generally speaking, three fundamental methods of conducting tumbling and apparatus classes: (1) the class method, (2) the squad method, and (3) the free play method. A combination of the above may be considered to be a fourth method. It is impossible to say that any one of the methods is the best. The circumstances must be carefully studied to determine which method should be used. The size of the class, amount of equipment available, ability of the instructor, size of the gymnasium, age and experience of the boys, homogeneity of the class, etc., are all important factors in making the choice. All of these methods have their advantages and disadvantages and their use is dictated by the particular situation. Probably, no one method should be used exclusively regardless of the situation. All should be used to provide interesting variety to the teaching.

The Class Method

This method derives its name from the fact that the entire class is under the direct and constant control of the teacher. The instructor explains or demonstrates the stunt and then signals the first student in each squad to advance and perform the stunt. When all have finished, he signals for their return and the advance of the second student in each squad. This continues until all have had their turn and then, at the discretion of the instructor, they may repeat the stunt or go on with the next one. The number of squads usually depends on the number of duplicate pieces of apparatus or mats that are available.

It is true that this method is quite formal. The formality and stiffness may be reduced somewhat by allowing the boys to approach for their turns as soon as the person in front of them has finished, instead of awaiting the signal of the instructor, which would not be given until all the performers had finished. Even the more formal of the two versions is still less rigid than the original teaching of apparatus work to classes because stunts, rather than positions assumed at the teacher's command, are used. If additional informality is desired,

an occasional game situation can be achieved by setting up relay races using the stunts as the means of locomotion. This is especially easy to do with many tumbling and simple stunts. It may also be done on the apparatus, but here there is the safety factor to consider. If used at all, the stunts should be easy and the students proficient.

Be that as it may, although the author is a firm believer in the informal program, he has no quarrel with a portion of the program being conducted in a semi-formal manner. There are lessons to be learned from this type of instruction, and a well-rounded program should contain a variety of methods as well as a variety of activities.

This method is primarily intended for beginners, since the teacher may exercise more control over the class and it is therefore a safer method. It is also a good method to use at the beginning of the year's work on the apparatus, even for comparatively advanced classes. It should precede the use of more informal methods.

ADVANTAGES OF THE CLASS METHOD

1. Disciplinary problems are reduced, since the entire class is under the direct and constant control of the instructor. Boys learn to take their turns, await signals, and to follow authority.

2. The students' performances can be observed easily and their progress noted. Thus, the amount of practice on each stunt can be regulated to fit their needs.

3. The teacher's time and energy are conserved because he can give demonstrations, suggestions, and corrections to the entire class at the same time. This leads to a better job of teaching on his part.

4. It enables the teacher to conduct the class without the aid of trained squad leaders if they are not available.

5. It is safer for several reasons: a. The class is under better control which cuts down possible dangerous "horse play." b. The instructor can make sure that only the stunts planned for that day are being practiced. This will eliminate the possibility of a daring student trying too difficult a stunt. c. The instructor can assure himself that all spotters are ready and in position to act before he gives the signal for the performers to try the stunt.

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DISADVANTAGES OF THE CLASS METHOD

1. It is a formal method, regardless of how it is varied. As such it is held in disrepute by many modern educators.

2. It does not allow for individual differences. Talented students cannot progress as rapidly as they are able. This tends to make the work dull and uninteresting for them. Then too, the poorer performers are made to advance too rapidly because the progression is usually geared to the ability of the average, or majority in the class. It is not feasible in classes where there is a great variation in the ages and abilities of the students.

3. It is not conducive to the development of leadership, initiative, or self-expression.

4. It is not conducive to the development of *real* discipline (self-control). Discipline comes from subjection to authority. The feeling is that of behaving because of being watched and not because one feels it is the right thing to do.

5. It tends to reduce the fun and spontaneity of the students.

6. It requires a number of duplicate pieces of apparatus and is therefore more expensive.

The Squad Method

The squad method is one in which the class is divided into a number of squads and each squad works independently, under the control and guidance of a squad leader. Each squad usually works on a different piece of apparatus or on different tumbling stunts. However, the same method may be used when all squads are working on the same stunts.

The squad leaders should be specially trained for their job. To be most effective, their training should take place in a special class and should precede the use of the squad method by several weeks. The instructor prepares the lesson for each leader and then the leader conducts his squad as though he is the teacher. The instructor acts as a supervisor and goes from squad to squad, aiding the squad leaders and offering helpful suggestions to the performers.

There are three varieties of the squad method: (1) the fixed squad, (2) the rotating squad, and (3) the choice squad. They are essentially the same in principle, but their organization is somewhat different. The fixed squad method is exactly as described above. Each squad is assigned to a definite activity and the squad, with its leader, works on that activity for the entire period.

In the rotating squad, a given squad spends only a portion of the period at a particular piece of apparatus. At the instructor's signal, the squads all rotate to another piece of apparatus. Usually, the squad leaders do not rotate with the squads. Thus, a leader who is particularly effective in teaching parallel bar stunts will be able to give the benefits of this ability to the entire class instead of just to one squad. This does, however, have the disadvantage of preventing the squad leader from becoming as well acquainted with the various abilities and peculiarities of the boys as he could if he had just one squad to work with. It is possible to do a much better job if he understands the boys better. Then too, it prevents him from gaining the experience on the other pieces of apparatus which he deserves and should have.

As the name implies, the choice squad method permits the boys to choose the piece of apparatus on which they wish to work. The apparatus is set up, the squad leaders are stationed at their apparatus, and at

OTTO RYSER graduated from Normal College in Indianapolis and then coached basketball at Orange Twp. High School during the school year 1940-41. Ryser was appointed as an instructor in physical education at Indiana in 1942 and in 1948 was made gymnastics coach.

a signal, the students go to the squad of their choice. The instructor decides beforehand just how many are to work in each particular squad and when that number is reached, the squad leader does not permit anyone else on the squad. This method, since it allows a choice, is more in accord with modern precepts, but it does have the danger of permitting the boys to select the same piece of apparatus each time, usually the one in which they are most proficient, and, thus, they fail to get the well-rounded experience they should have.

ADVANTAGES OF THE SQUAD METHOD

1. More work can be accomplished. The entire class is not held up by a few slow boys.

2. Greater allowances for individual differences can be made. It is especially good for classes in which there is a wide range in age and ability.

3. Student leadership is promoted.

4. Better citizenship training is afforded. The boys learn to govern

themselves; to follow leadership which they have selected or which has been appointed for them.

5. Individual instruction is possible when capable squad leaders are in charge.

6. It is less formal than the class method and, therefore, it is more fun and more acceptable in the light of the present educational philosophy.

7. Duplicate pieces of apparatus are not needed. A good program can be carried out with one piece of each of the apparatus.

DISADVANTAGES OF THE SQUAD METHOD

1. The class is harder to control, since the instructor's attention is occupied by one squad at a time.

2. It is more dangerous, since the instructor cannot check on the spotting of each performer and then too, daring students may try stunts they are not capable of performing.

3. Timid students who need the work most may intentionally miss their turn, or eager, aggressive boys may push them out of the way and monopolize the apparatus or tumbling mat.

4. The teaching is not as effective, since only one squad at a time gets the benefit of the teacher's knowledge and experience. It is possible for some squads to receive false and harmful hints on a particular stunt because they may have passed onto another stunt by the time the teacher gets around to them.

5. Insufficient practice and drill on stunts may result in fundamentals and lead-up stunts not being learned properly. This may cause trouble when more difficult stunts are attempted.

6. It is a waste of the instructor's time and energy since he may have to repeat the same explanation and demonstration to each squad.

7. Additional class time is needed to train the squad leaders.

The Free Play Method

The free play method is not recommended for regular, day-after-day, use. Its main uses are for practice periods, periods for checking aims, adding variety to the programs, developing initiative on the part of the students by allowing them to work up their own combinations of stunts previously taught, etc.

All the apparatus is set up at the beginning of the period and the boys are allowed to go where they wish and do what they want to do. If specific aims are set up on each apparatus by the instructor as a means of determining grades, this period may be used to check the aims. Each stu-

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dent has his *aims chart*, and he takes it to the squad leader in charge of a piece of apparatus, who checks the aim when or if it is successfully done. The instructor acts as a general supervisor and keeps things running smoothly, assisting those who ask for help.

At first thought, this seems to be the easiest of the three methods to conduct. In fact, it does not even seem to be a method. Actually, however, it is quite difficult to do properly. The teacher must be everywhere at the same time and must give his attention to each individual. It is, if done correctly, individual instruction.

ADVANTAGES OF THE FREE PLAY METHOD

1. It is very informal and creates a great deal of fun for the boys.
2. It gives each boy a chance to practice on any stunt with which he has had difficulty. He may spend the

entire period on it if he so desires.

3. It permits a maximum opportunity for self-control, initiative and creativeness which is one of the salient characteristics of the present-day philosophy of physical education.

4. It provides opportunity for developing an attitude of safety.

DISADVANTAGES OF THE FREE PLAY METHOD

1. It does not permit a great deal of actual teaching.
2. It allows opportunities for loafing.
3. Unless care is taken, the boys will work on the stunts they do well (to show off) instead of working on stunts they do poorly.
4. It is dangerous unless the teacher is extremely watchful because there are many opportunities for students to try difficult and dangerous stunts without spotters.
5. There is a tendency for the in-

structor to turn the boys loose and either sit down and take it easy or do some other work.

No matter which method, combination, or variation of the methods is used, the main point to be stressed is the fact that *stunts* and not *exercises* are to be taught. In some instances, the difference may just be in the mind—in the point of view held by the instructor, but that difference must be conveyed to the class.

The problem of methodology discussed in this article deals, of course, with the teaching of physical education classes in the regular physical education program. A natural and very desirable outgrowth of this work in the classes is the special work done with special groups for exhibition, club work, and varsity competition. The methods used in this type of teaching or coaching will be quite different.

Tulane's Pivot Continuity

(Continued from page 12)

the line. O3 and O7 move out for safety on defense. (Illustrated in Series C.)

In the second variation of play 6, as is shown in Diagram 4, O4 passes to O6. O3 splits with O4 and screens for O5 who is the second man cutting in. O4 moves out if he does not receive a pass from O6. (Illustrated in Series D.)

Play 7 is shown in Diagram 5. O4 fakes a pass to O3; O3 rolls out and screens to the opposite corner for O7, and O7 sets up the post. While this has been going on, O4 passes to O5 and splits with him. O5 dribbles, then passes to O6 who meets the pass, and gets it into O7, if O7 is open. Now all of the players see who is on the pivot. If O6 passes to O7, then O6 rear splits with O5 and then O4. The middle lane should be kept open so

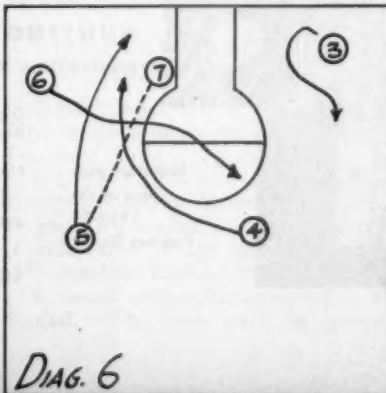
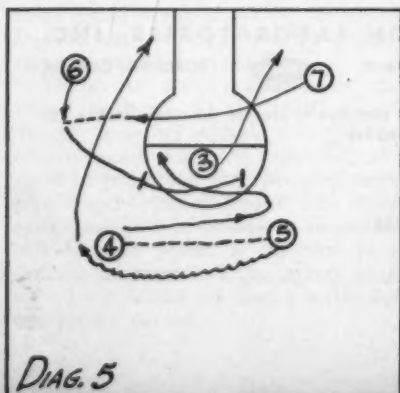
O7 may, for example, fake a pass to O4 and roll in down the foul lane. O5 is out for a middle distance shot, as is O6. (Illustrated in Series E.)

There are four variations that O7 may use when he gets the ball. First, he may pass to O6 for a shot in the free throw circle; second, he may pass to O5 cutting in for a lay-up; third, he may pass to O4 for a middle distance shot as the second man cutting and splitting with O6. Fourth, he may fake all three variations, and since the middle lane is open, turn into the lane, dribble in or take a hook shot. These same variations are possible in the first variation of play 7. (Illustrated in Series F.)

Diagram 6 shows the first variation of play 7. If O5 passes into O7, then O5 cuts inside and O6 splits off of

O5. O6 then rear splits with O4, who is the second man around O7, the pivot player. If no one gets open, O7 after faking passes to O5 and O4, may turn into the middle for a drive in on his right-handed hook shot. If no openings occur, then O7 passes out to let O3, and the other players start another post continuity as soon as the guards, O4 and O5, are in out positions again. (Illustrated in Series G.)

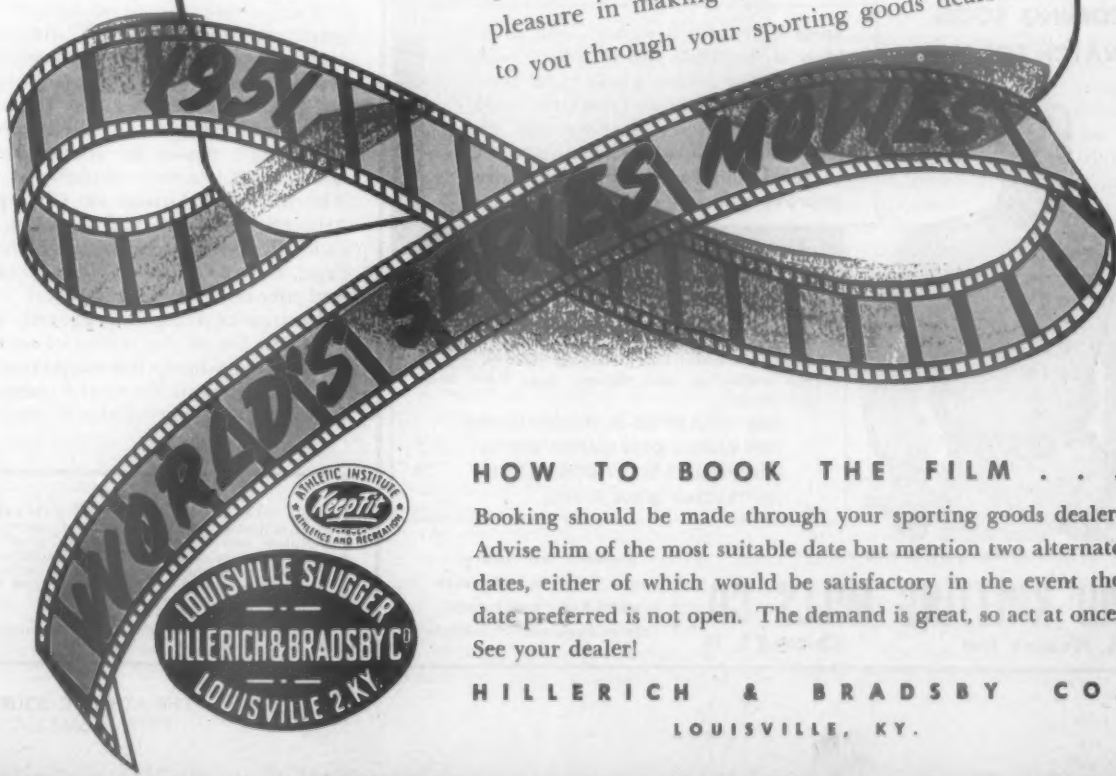
Now if O5 passes to O7 and cuts to his right, then O4 splits off of O5 and cuts, as is shown in Diagram 7, which is the second variation of play 7. O5 screens for O3 who fakes a cut to go for the goal, then comes out for a possible shot in the free throw circle. Now we have three variations of O7's setup. This is true of each pivot player, since he is on the post and



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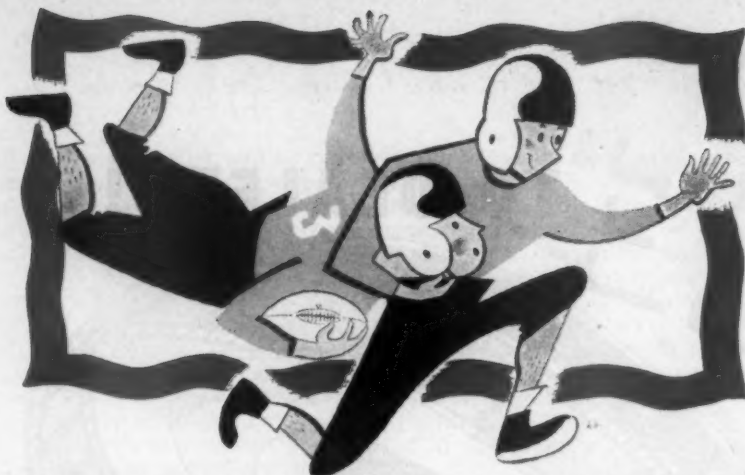
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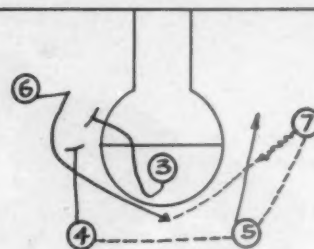
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DIAG. 8

identifies the play.

In Diagram 8 we have the third variation of play 7. When the ball is advanced from the back court to the front court, and O3 is on the post, then O3's play is run and O4 passes to O5. O4 and O3 form a double screen for a spot shot for O6 as O5 passes to O7 and splits with him, in order to time the screening for O6. All of the players should be kept moving in order to keep the defense from sagging or floating to stop the play. If the play does not work, O3 moves to the corner, that player moves in on the pivot, and another play is started.

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The Pressing Sliding Zone

By **GEORGE A. KATCHMER**
Newport, Pennsylvania, Joint High School

THE pressing, sliding zone is more or less a combination of the pressing man-for-man and the waiting zone, with slight modifications. To many players and coaches it is somewhat hard to distinguish, that is, it takes the defense some time to realize that they are not really playing against a pressing man-for-man, but rather against a collapsing zone which plays ball position on the floor after the ball is brought into the forward court. The slides come into play at this stage. Again, it is worth mentioning that the defense aligns itself according to the position of the ball, and not in accordance with the position of the offensive players.

Probably many who read this article will recognize their own defensive patterns; however, there may be one or two variations that may prove significant. Many coaches have used a pressing zone which collapses into a regular zone. This zone may be sliding or otherwise. The zone we have used successfully is a combination of the pressing man-for-man, plus elements of the sliding zone as taught and advocated by John Lawther, former coach of basketball at Pennsylvania State College. We say elements, because we do not want to convey in any way the idea that this is the system in its entirety or near entirety, as taught by Mr. Lawther. After attending his coaching clinic, elements of his zone which best suited our style of play, as well as material, were adapted into our system.

There are advantages and disadvantages in any style of play, nevertheless, the advantages from the pressing, sliding zone far outweigh the disadvantages. Some of these advantages are:

1. It has the elements of the pressing man-for-man as well as the zone defense.
2. The advantage of a fast break is present.
3. A fast offensive team may be slowed down.
4. It has an advantage over a slow ball-handling team.
5. Offensive screening is lessened.
6. Back court defensive strength is provided at all times.
7. Confuses the offense.
8. Utilizes players according to ability.

This style of play is especially adaptable to a team which has stressed the

pressing man-for-man style of play. We found ourselves in this situation. After using the pressing man-for-man for years we suddenly found ourselves with material incapable of playing this brand of basketball. Then we switched into the pressing, sliding zone style of play which gave every appearance of the pressing man-for-man. The opponents had difficulty in diagnosing our defense. Screening

time may be governed according to the development of the players.

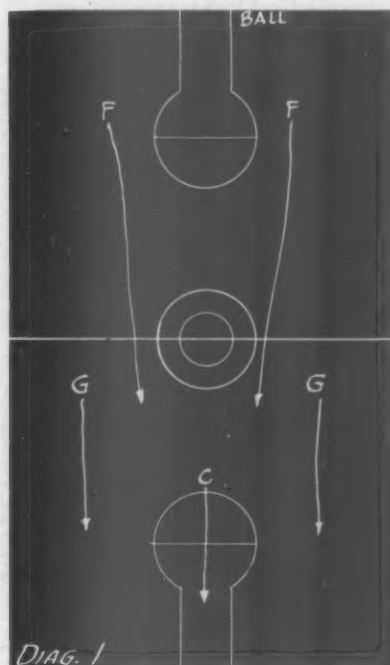
In this drill, the squad is divided into two groups. Each player is assigned to a player on the opposite side. During the first ten minutes only passing is allowed, with dribbling prohibited. The idea is for either side to keep possession of the ball. Boys are advised not to wrestle for the ball, since there are no out-of-bounds or jump balls. No attempt is made to shoot for the baskets. The idea is to keep the boys on the move for thirty minutes. Each team naturally is trying to get possession of the ball and this brings the defensive fundamentals into play. The offensive elements, as well as conditioning, are receiving an equal share of returns from the drill. We devote the second ten minutes to the bounce pass, and in the final ten minutes use the dribble, along with any combination of passes.

The diagrams will show the defensive alignments in their simplest forms, in order to avoid confusion.

Perhaps it would be wise to bring out the point, that once the players move into the close zone they must be continuously alert, and able to move fast at all times to be in floor positions according to the position of the ball on the floor.

Diagram 1 shows the general floor positions when the ball is in the offensive back court. Of course, this depends entirely upon the position of the offensive players. Generally, a guard will be throwing the ball in bounds and the other guard, the center, or a forward will help in bringing it up court.

The defensive forwards are in the back court on their respective sides. They play any offensive man in their area according to their ball-handling ability and agility. A slow guard or poor ball-handler would be played close, while a fast, good ball-handling guard or center would be played loose. The forwards are instructed to play the man in their immediate area from the rear and to the inside of the man. In other words, they are trying to force this man to the sidelines where he may be bottled up or forced away from the center of play. The distance to the rear with which they play this man in their immediate area may vary from a yard to three yards. The closer they are, the better opportunity they have for interceptions, tie-ups



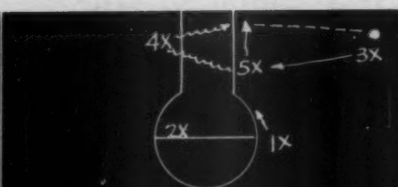
attempts were made, but these failed because there were always other defensive men waiting. This is one of the advantages of the zone.

This style of the pressing, sliding zone, and the intricate details of the system will be explained with the aid of diagrams.

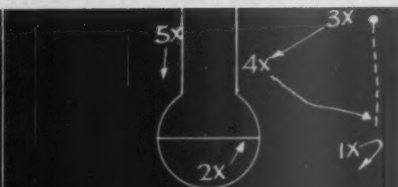
A word of caution is necessary — the players must be in good physical shape. The physical wear upon the player in this defense is almost as great as that called for in the pressing man-for-man. We found the best drill to use for conditioning the players is a combination of ball-handling, passing and man-for-man defense. It is our opinion that thirty minutes per day spent on this drill should be the minimum during pre-season practice. When the playing season begins, the



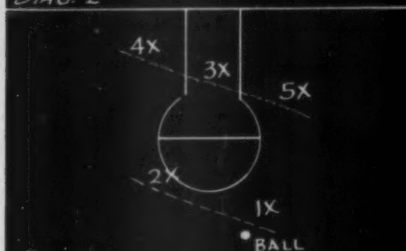
DIAG. 2



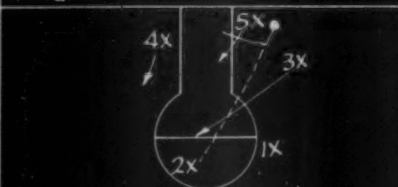
DIAG. 8



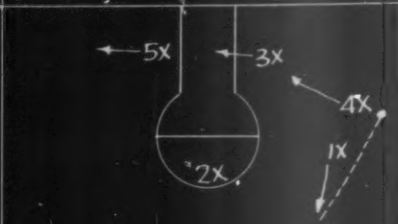
DIAG. 14



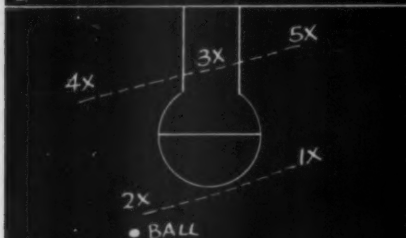
DIAG. 3



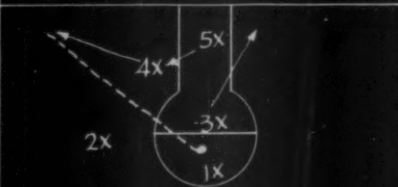
DIAG. 9



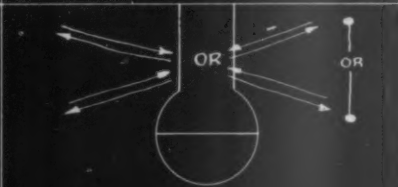
DIAG. 15



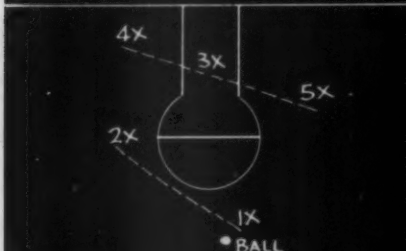
DIAG. 4



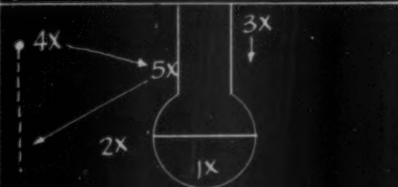
DIAG. 10



DIAG. 16



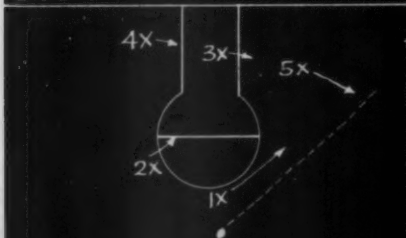
DIAG. 5



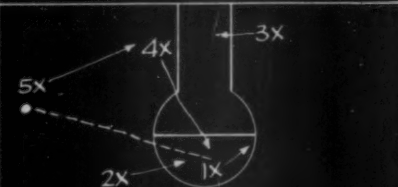
DIAG. 11



DIAG. 17



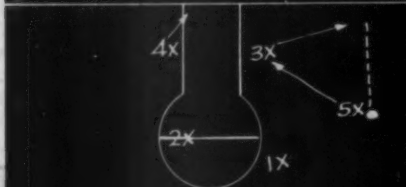
DIAG. 6



DIAG. 12



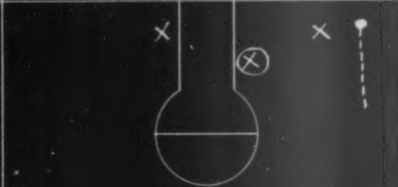
DIAG. 18



DIAG. 7



DIAG. 13



DIAG. 19

or batted balls. Again, this will depend upon the ability of the offensive man. In this stage, it will be noted that Advantages 1, 2 and 4, outlined above, are demonstrated.

Once the ball is passed in successfully, the forwards drop back, always keeping any player in their zone in sight before them. This will have a tendency to slow down the offense. (Advantage 3).

If the offensive players are fast and clever enough to get by these pressing forwards, there are still three men in the back court for defense until the two forwards can get back into defensive zone positions (Advantage 6).

The whole setup brings out Advantage 8 because the players can be fitted into defensive positions according to height, weight and ability.

The forwards may also be instructed to play man-for-man down court. This will tend to confuse the offense by giving them the impression of a pressing man-for-man. Once they get back over mid-court into their area; they remain on whatever side they find themselves and slip into the sliding zone. The slides are the same for each forward in the zone.

The play of the guards is determined by the position of the offensive forwards. Should the center go down court to help bring up the ball, the guards would follow at a conservative distance to the rear and to the inside. They always keep any offensive player, for whom they are responsible, in sight whenever they come up court. Should one forward drop back towards the basket, the guard concerned would drop back also, until he was sure the center was able to take over.

The center remains back to pick up the first offensive man coming towards the basket. When the first offensive man comes toward the basket, the center plays him man-for-man until the other defensive men drop back into the zone, at which time he assumes his zone duties.

In case one offensive man stations himself near the defensive basket, the center will automatically play him man-for-man until the defensive collapse is completed into the close zone.

The guards will play out whenever four offensive players are back court. Against three back court players, two defensive players will always remain in the immediate area of their basket, playing the two offensive players who are maneuvering there. This would leave two forwards and a guard up front, since the center is always one of the basket defenders. The guard would play the middle of the court, that is, the distance between the two forwards and two back defenders. He moves about, according to the offensive player who may be in that area.

It should be remembered that no defensive player is trying to guard or hinder the passer from out of bounds. The idea is to keep five defenders on four offensive men, until the ball is passed in bounds. The strategy is to intercept the pass, tie up any successful competition for a jump ball in the basket area, force the passer to delay too long, or harass any quick offensive drive down the floor. This type of pressing zone is very effective on small courts which may be narrow or have a low ceiling.

The second phase of this defense deals with the slides, once the zone is set. The procedure used in these slides may be simplified by stating one simple principle and, that is, "The defensive man nearest the position of the ball will assume the guarding duties, while the others will array themselves in the vicinity of the basket, in order to make it the least vulnerable."

In explaining the latter part of the above principle, there are definite spots the players should be in whenever the ball is in certain areas. A coach, reading this article and studying Diagram 2, will see these spots.

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Diagrams 3, 4 and 5 show how the players line up in parallel diagonal lines, depending upon what position the ball occupies on the floor. This allows for fast slides to any spot in the defensive area.

By following the flight of the ball, broken lines, as shown in Diagrams 6 through 15, and the arrows which show the slides of each defensive man, a better idea of this type of zone is offered than any written explanation could give. One aspect of this zone should be borne in mind whenever the charts are studied. The two forwards never change positions, whereas the two guards and the center are interchanged according to the posi-

tion of the ball. Guard, 4, starts on the left side of the floor, yet through a series of passes could find himself in 5's position on the right side. Diagrams 8 through 15 show how 4 and 5 interchanged. The same could hold true for the left side of the floor depending, of course, on what side of the floor was attacked by the offense.

Anytime the ball goes into a pivot man in the upper half of the key, the defensive man nearest to the spot will take him. Then the next man will jump into the lower half of the key, about a yard and a half away from the basket. The other man will take a position on the outside of the key on whatever side he finds him-

FOLLOWING graduation from Lebanon Valley, George Katchmer coached at Cherrytree, Pennsylvania, High School. Entering the service in 1941, he served as Director of Physical Training at Ellington Field for two of the five years he was in the army. He returned to Cherrytree for two years, and in 1948 assumed his present duties at Newport.

self. Diagrams 12 and 13 show the slides.

Any ball passed into the guard areas will find the three back men interchanging. This gives every evidence of a man-for-man defense. These three boys slide sideways, but never forward. Any side position will find two men on that side, sliding in the form of a V, Diagram 16.

As is shown in Diagram 17, when the ball is on the side, but inside the continuation of the foul line, two defensive men must be on the side the ball is on. Whenever the ball is in the key, two defensive men must be in the key. The man opposite from where the ball is passed into the key, assumes the back key position (Diagram 18). The middle defensive man, circled in Diagram 19, must be in a position to cover a pass to the upper side. The other left-side guard covers the basket and the opposite side.

Diagram 2 shows in detail this interchanging. A pass from C to I to M to D, would find the following men covering the positions: C-1, I-5, M-3, D-1. Also, B, E, F, J, K, L, M, I and D would be covered by 2, 4, 3, 4, 3, 5, 3, 5 and 1.

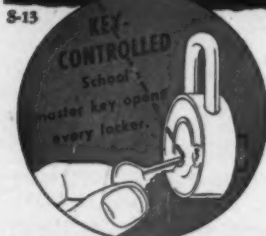
A pass to C would find the defensive alignment as is shown in Diagram 2; C to I shown in Diagram 6; I to M in Diagram 7; M to L in Diagram 8. Diagram 8 also shows an alternate slide, broken lines, depending upon how far inside the key the pass has been completed. A pass L to G is shown in Diagram 9.

In looking at Diagram 10, for example, one might get the impression that there would be large gaps in the defense. This is not so, because if the boys are really hustling, most shots will be rushed or blocked. One good point is, that if a good fake or fast play does break an offensive man away from one defensive man, there is always another man to take his place. In the meantime, the lost player gets into an entirely new defensive position and is ready for a new defensive slide.

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Revolving Offense

(Continued from page 17)

to solve the offense by sinking back under the basket, the plays shown in Diagrams 6 and 7 are effective for short outside set shots. If these plays are used, it is important that the rebounders block out the defense and then play the backboard.

These patterns are simple, but should be given slowly. It would be wise to start with the plays shown in Diagrams 1 and 3 and work on basic floor movement. Then one play should be given at a time. Each play should be worked on until the players can use any one without having to study it. The patterns should be alternated to keep the defense confused. All diagrams show the plays to the right side, but they go to the left as well as to the right.

There is no distinction between the forwards and the guards. All four players must be able to play from each of the four positions without becoming confused. This is effective against a man-for-man defense because the defensive guards will find themselves guarding a man outside in a guard position, and the defensive forwards will be inside guarding from a guard position. In many cases, this is confusing to the defense and when they make mistakes there is a good opportunity for a score.

Winning Attacks

(Continued from page 13)

overload a particular area of the zone and take shots from that area. Sixty-eight per cent of the teams in the study attempted to beat the zone in this fashion, if they did not out-break the zone before it became set.

When any individual shoots, O3, O4 and O5 form the rebounding triangle and follow in hard after a shot has been taken (Diagram 4). O1 and O2 move back for defensive balance after the shot, to slow down any fast break that may evolve off of the zone defense. The overloading can take place on either side, depending from what side the set shot artist can hit the best.

Twenty-eight per cent overloaded with a 1-3-1 offensive setup and organized a triangle passing pattern.

In Diagram 5, O1 follows his pass when it goes to O3, and the same thing is done if O1 passes to O5.

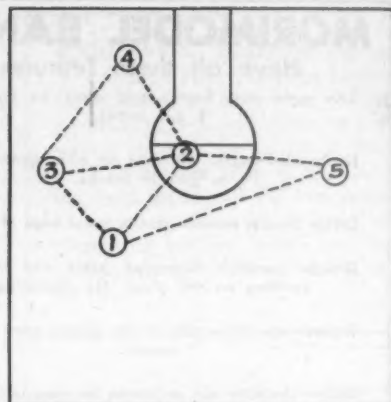


Diagram 5. 1-3-1 Offensive Pattern Against the Zone.

O4 is on the side to which the ball is passed. O3, O4 and O5 form the rebounding triangle, and if necessary O2 can also rebound if the opponents are exceptionally tall and do not fast break. O1 must be a good shot from out front, and a very good ball-handler and play-maker. O3 and O5 should be excellent shots from the sides and O2 should be a good pivot shooter.

The remaining 4 per cent overloaded the center, as indicated in the next three diagrams.

This formation is known as the 1-2-2

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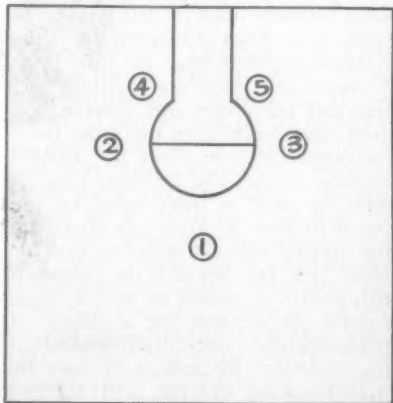
offensive setup against the zone defense (Diagram 6). It is good for short shots against the zone and very strong offensive rebounding, if a coach has a team of poor shots and very short men. The only drawback is the difficulty of doing much passing in such a tight formation. O1 must be an expert ball-handler, and have the ability to feed the other four men. O1 roams wherever the ball may be, to form the triangle pattern of passing.

In Diagram 7, we have the formation which is known as the 2-1-2 offensive setup against the zone defense. This attack is based on rebounding strength and defensive balance against the fast break off of the zone defense.

Diagram 8 shows the formation which is known as the two-out and three-in. It will be noticed that the last formations are used in conjunction with the respective zone setup; that is, the 2-1-2 offensive setup may be used against the 2-1-2 zone, etc.

Fast passing is necessary in the three formations, and there is a possibility of many interceptions in such close areas. Fundamentally, the way to break up the zone defense is to fast break the opponents before the opponents can set up the zone. If this cannot be done, then the next best thing is to overload a particular

Diagram 6. Offensive Setup Against the Zone.



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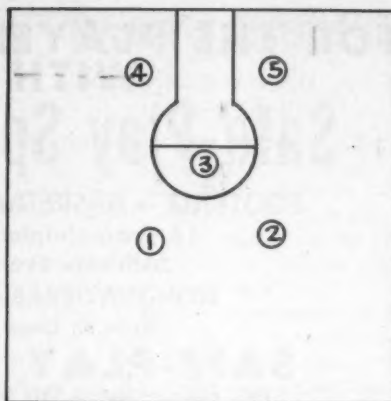


Diagram 7. 2-1 2 Offensive Setup Against the Zone.

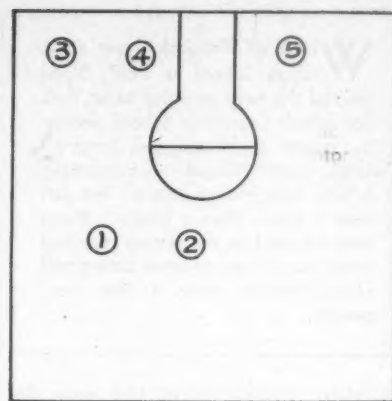


Diagram 8. Two-Out and Three-In Setup.

area which should be the weak spot. This is found through scouting a team. If the weak spot is a tall man who moves slowly, this area should be overloaded and the ball moved around him. If this is done, there will be many opportunities for easy "crip" shots.

The investigator's opinion on breaking the zone defense, which was formulated through his experience as a coach and director of the New York Basketball Coaching School, is not the old theory, that the ball is moved fast, but the ball should be moved, plus some cutting and screening, just as would be done against the man-for-man defense. It will be found that

this method is much better than the old theory of moving just the ball. These two thoughts of fundamentals should be incorporated, and as previously stated, "Move the ball and the man." It is surprising how easily a man of a zone defensive team may be moved by good faking and set up for an easy shot under the basket; because men on the zone defense will leave their feet on fakes. Instinct tells the individual to go and cover the man as well as the ball, even though he is coached to play only the ball and not the man. The player on the defense does not want to be outdone and, therefore, will be more aggressive and forget the ball.

The Kinert Press

(Continued from page 15)

and throw to the middle of the court, in order to get the fast break started.

The pressing zone may be used as a strategic defense under various conditions. Our pressing zone was particularly successful in coping with three general situations.

1. *Used as a surprise defense.* We met one of the better teams from a neighboring state on its home court. Since our opponents had not scouted us, we decided the pressing zone defense might decide the game in the first quarter. It did.

2. *Used to get the ball quickly late in the game if the team is behind, or ahead by only one or two points.* The pressing zone was used twice against teams when we were ahead by only one point, with two minutes left in the game. Our boys were able to gain control of the ball both times.

3. *Used to force a team to play, namely, a team that used stalling tactics and strict ball possession from the opening whistle.* The pressing zone

was especially valuable to us this year because we met this ball-possession strategy eight times during the season. This zone might be used as a standard defense if it fits the material well. One danger is that late in the season the team might be very tired and go downhill rather than show improvement.

It is our belief that enough of the basic fundamentals of this type of defense have been presented for those interested in coaching the zone press. A coach will learn many things each time his team uses this defense, and even more each time the team meets an opponent who uses it. Indeed, whether or not the pressing zone defense is used, a team must be prepared to meet it. Although an offense for coping with the pressing zone defense lies far beyond the scope of this article, it would be well to make careful preparation for a special offense against a potentially demoralizing situation, for sooner or later the pressing zone defense will be met.

The Knee

(Continued from page 22)

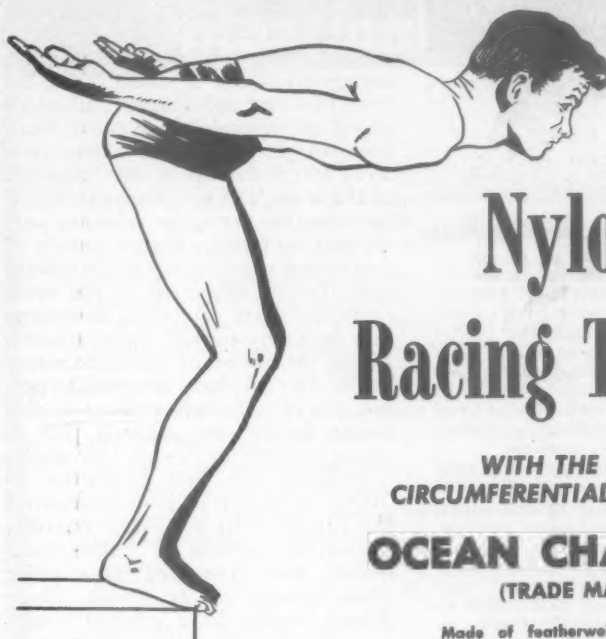
attempts to rise, he cannot, due to the pain, and because the knee is *locked*. This is caused by a dislocated or torn cartilage which is caught between the articular surfaces of the tibia and femur, as shown in the diagram. There will be tenderness to pressure over the side of the joint, at the side of the injured cartilage. If the person has experienced this type of accident before he will often give his knee a shake, or have a friend manipulate it for him, until he experiences a sense of something giving away, and full extension will thus be restored. If he cannot do this, it should be done for him, under an anaesthetic. Then a light plaster bandage or a splint should be applied. If the injury has occurred for the first time, the immobilization should be continued for two or three weeks, in the hope that the cartilage will repair itself.

In the cartilage injury just mentioned, surgical intervention is often necessary to prevent repeated locking and interference with activity later in life. Removal of the cartilage does not interfere with the normal function of the joint and is strongly advocated.

After sufficient rest and immobilization, the physician usually recommends careful exercises to restore function to the injured knee. The muscles of the inside and front of the thigh should be developed. Knee bending, especially deep knee-bending should be avoided until the knee has fully recovered.

Treatment of the injury will not be stressed, since the coaches and physical educators are more concerned with keeping the joint in good shape and returning it to normal after an injury. The diagnosis and actual treatment will be left to the physician and we must follow his diagnosis and prescription.

Exercises for conditioning the knee after an injury should follow a program of definite progression. If the ligaments above the knee are injured, the part should be immobilized for at least ten days, and then exercises which do not require weight-bearing should be used. It must be kept in mind that returning to activity too soon may result in a chronically weakened joint. Many authorities believe that knee conditions which are allowed only three weeks of rest, have a fifty-fifty chance of returning to normal. If the cartilages are involved and the condition does not respond



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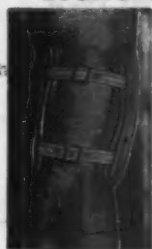
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to conservative exercise treatment following a three weeks' rest, surgical intervention should follow.

Some authorities disagree with the suggestion of rest as stated. They believe that rest and fixation, although sound in principle, often prove disastrous to the patients who have suffered severe damage to the ligaments of the knee. The use of a crepe bandage deprives the vastus internus part of the quadriceps extensor muscle of much-needed action, since it interferes with the full extension of the knee. Opinion differs as to when movement may be safely started. Some authorities say the day of the operation, while others say ten days, or even longer, but too often weight-bearing is permitted before the affected part is strong enough to permit this strain.

Probably the best procedure to follow, as we see it, is to immobilize the injured part following fracture, dislocation, sprains or strains until healing has progressed to a point where exercise can be started. There should usually be a gradual transition from muscle setting exercises to the very gentlest of relaxed movements; then to a little more vigorous passive movement; then to active and assistive exercises and finally to free active movements.

When the patient has reached the stage of active exercise, it is often advisable to give him instructions concerning the free exercise of individual joints. These instructions often may be employed to promote improvement in the range of motion of a joint. The following exercises may be prescribed for trauma or prolonged immobilization and should be carried out according to the instructions.

Exercises for the Knee Joint:

1. The patient should do only those exercises prescribed.
2. He should not overexercise and should stop exercise when the muscles begin to tire. Exercise should be increased only as the muscles become stronger.
3. All movements should be done slowly and deliberately.

For Patients with Limited Flexion:

1. The patient should lie on his abdomen, then make a complete turn of the bandage around his foot and ankle. While holding both ends of the bandage, he should attempt to flex the knee by pulling up on the bandage.
2. Sitting with his back against a wall, the patient should place his feet on the lower rung of a chair with his knees bent. Then he should grasp the chair with both hands and pull it towards his body.

3. From a position on his hands and knees, the patient should sit back on his heels.

4. The patient should stand and grasp the back of a chair with his hands. Then he should bend his knees and assume a squatting position, placing the weight of his body on his toes.

For Patients with Limited Extension:

1. The patient should sit on the floor or in bed, with his knees as straight as possible. He should place his hands on his knees and press them downward by swinging forward with the upper part of his back and shoulders, keeping his elbows straight.
2. The patient should stand, bend forward and place his hands on his knees. While keeping his elbows straight, he should force his knees backward by swinging his shoulders and the upper part of his back downward.
3. Place a chair in a doorway with the back of the chair against the door frame. The patient should place the heel of his injured leg against the opposite side of the door frame and rest his knee on the padded edge of the seat of the chair. Then he should grasp the back of the chair with his hands and straighten his knee by leaning forward.

It must be kept in mind that the most important element in the knee joint function is the fact that the knee depends largely on the power of the quadriceps extensor muscle, the powerful muscle that occupies the front of the thigh and inserts into the patella or knee cap. Injuries to this muscle, close to the knee, are often mistaken for knee joint injuries because of the tenderness and pain experienced when flexing the knee. These injuries should receive prompt attention if good function is to be restored, and the quadriceps extensor muscle should be strong in order to protect the knee against almost any ligamentous disability. Power must be developed, therefore, exercises such as climbing the stairs of the stadium, which develop endurance but not power must be omitted. The following exercises are the kind that develop power:

1. Quadriceps or patella sitting: Position: Sitting or lying in bed. Movement: Patella sitting—contract the quadriceps extensor muscles, draw the patella upward and extend the knee. Note: This exercise is contraindicated in cases of fractural patella or injury of its tendons.
2. Knee stretcher: Position: Sit with affected leg hanging over the

edge of a padded table. Movement: 1. Extend the leg by contracting the quadriceps muscles. 2. Relax. Note: The development of the quadriceps is important in restoring normal knee function. To develop the necessary power of the quadriceps, the patient should raise ten times every day the maximum weight which can be handled. A one pound weight should be used at first and this increased until 25 pounds can be lifted. Complete extension at the beginning is not essential, since exercise within the range of motion builds power which soon makes complete extension possible.

3. Alternate leg raises: Position: Lie supine with the hands at the neck in a firm position. Movement: Alternate raises of the leg with the knee straight, foot dorsiflexed, inverted and the toes held curled away from the body. Note: This exercise may be made more difficult by resting the ankle of the uninjured leg on the injured leg and giving slight resistance to the raising of the injured leg.
4. Bicycle: Position: Lie with the palms of the hands under the buttocks, the legs straight and toes pointed toward the ceiling. Movement: Go through the motions of pedaling a bicycle slowly. Note: Extreme flexion of the knee should be avoided. Flexion should be into the arc of pain.

Flexion is of secondary importance in the restoration of functional strength to the knee. Full and powerful extension should be the chief objective of the exercise program for the knee. This extension strength is necessary for weight-bearing but it should be definitely demonstrated in non-weight-bearing activities before weight-bearing is permitted.

By the use of self-help apparatus, the patient may, by use of the normal limb, assist the affected limb in movement. For example, sitting on the edge of the table with cuffs around each ankle, the extensor of the normal knee may, by pulley attachment under the table, cause flexion of the affected knee. All flexion beyond 90° should be discouraged. A strong knee joint which can be bent 90° is far superior functionally to a frail joint which can be flexed beyond that angle.

These active exercises, plus the regular application of physical therapy, are the chief aids to recovery. In most knee injuries, if the patient responds to the treatment, he should be instructed to walk with a single crutch on the injured side, later a cane

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should be substituted and finally all support should be eliminated.

Now that we have our patient back on his feet, we as physical educators and coaches, must remember that once a knee injury has occurred, it is a potential weak spot for many years to come. According to physiological laws, it is a mistake to avoid active exercise as function makes structure, but activities which require quick starting and stopping should not be tried without a protective brace for at least six months after the injury. Application of any flexible bandage is of little use in supporting an old injury, and is of little help in preventing new knee injuries. A brace which will protect the ligament is one made of padded steel, attached to padded cuffs on the knee and hinged at the sides.

In conclusion, it might be mentioned that not only do we have to worry about blows or violence causing injuries to the knee, but it is believed that tight taping of the ankle causes the knee to take more than its share of the shock, thus causing injury to it. Therefore, it is obvious that we must make use of all of our knowledge and facilities to control and cut down injuries to the knee. The following are steps we should take to keep knee injuries at a minimum:

1. A vigorous program of calisthenics prior to and during the athletic season, particularly football.
2. Exclude those players from the game whose state of development and linear build make their knees more vulnerable.
3. Use of the proper supporting bandages by those who have had even slight ligament injuries.
4. Strengthening of the quadriceps and vastus medialis by supplementary exercise.
5. Encouragement of all methods which tend to keep players alert at all times.

Yes, the knee is a very vulnerable joint.

Trends in North Dakota

(Continued from page 24)

similar to the one used in comparing the fundamental skills, was used for rating the types of passes. Table IV shows the passes rated according to the importance they played in each coach's system of basketball. The chest pass was rated first by a majority of the coaches, while the roll pass was rated tenth.

Table IV
Rank Order of Passes According to Importance

Types of Passes	Rank	Weighted Score
Chest pass	1	1479
Bounce pass	2	1257
Baseball pass	3	1109
Hook pass	4	1081
Overhead pass	5	824
Underhand pass	6	738
Two-hand side pass	7	664
Backhand pass	8	382
Bat pass	9	375
Roll pass	10	283

The coaches were asked to rate eight types of shots according to their value in their system of basketball. In order to rank the shots in chronological order according to importance, a weighting system is used similar to Tables III and IV.

Table V
Rank Order of Shots According to Importance

Type of Shot	Rank	Weighted Score
One-hand push	1	1229
One-hand dribble in	2	960
One-hand jump and turn	3	847
Two-hand push	4	765
Hook	5	618
Two-hand overhead	6	569
Tip	7	555
Underhand	8	182

The one-hand push shot had the highest weighted score of 1229, while the underhand had the lowest score. The two shots which received the closest ranking were the two-hand overhead shot and the tip shot. The two-hand push shot, which in some sections of the country is considered the most popular, was rated fourth in North Dakota.

Nearly 75 per cent of the coaches permitted the players to shoot in the manner which seemed most natural to them. This referred to all types of shots. The two-hand underhand free throw was rated first, the one-hand push shot rated second, and the two-hand overhead shot was rated third.

The fourth objective of the study was to determine the relative evaluation with reference to practices regarding controversial issues, such as the use of conditioning exercises, charts, length of practice sessions, and interscholastic competition at certain levels. The tendency on the part of the average coach was to use calisthenic drills during pre-season basketball drills, and discontinue the practice after the start of the regular playing season. Most teams used shooting charts for regular games, although less than one-half the teams did not chart regular practice scrimmages. A good share of the coaches used individual performance charts for games. Practice sessions were ranked as to optimum length as follows: (a) one and one-half hour, (b) two hour, (c) one hour, and (d) two and one-half

hour sessions.

The situation regarding interscholastic athletic competition in North Dakota is indicated by comparing the number of teams at different grade levels. In Table VI we find a comparison of the number of schools having interscholastic competition below the seventh grade, above the seventh and below the ninth, and those with interscholastic competition at the ninth grade level or above.

Table VI
Number and Per Cent of Teams Having Interscholastic Competition at Different Grade Levels

Grades	No.	Per Cent
Below seventh grade	61	38
Above seventh and below ninth grade	78	49
Ninth grade and above	21	13
Total	160	100

Most schools in this state begin their interscholastic athletic competition in the seventh and eighth grades. There were 87 per cent of the schools that began interscholastic competition below the ninth grade level. More schools began their interscholastic competition below the seventh grade than at the ninth grade or above.

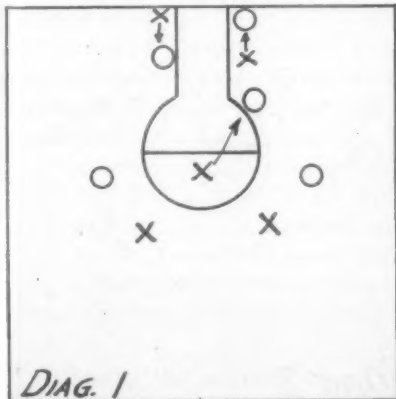
The lack of similar studies made comparisons difficult. Comparisons were made within the study, and with isolated facts given by authorities.

Full Court Press

(Continued from page 20)

tion plays. Although it does mean that occasionally we are guarding different men, it is our feeling that the speed with which the press is applied more than makes up for this disadvantage. Then too, this situation would occur frequently as long as the switch were used. We do, however, have one permanent assignment as far as possible, our big man will stay with the big man on the opposing team.

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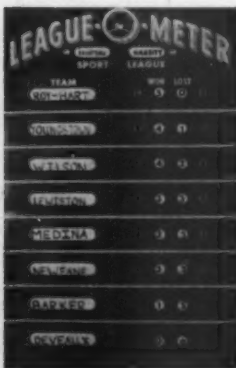
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we fail to score against a man-to-man defense, each player takes the defensive man guarding him. If we score from the floor, our two men closest to the basket, usually the forwards, pick up the last two men down the court. The two back men pick up the first two men down the court, with the weakest of the pair, physically, taking the first man through. It is entirely possible that the big men may not always be paired, and at such a time a switch should be made, if possible, to remedy the situation.

On foul shots, as well as against a zone, our assignments are determined by position rather than by rotation (Diagram 1). The two men on the line take the man next to them, while our shooter picks up the man assigned to guard him. Our two back men take the two forwards who are not on the line.

Against a zone, we usually play a 1-3-1 offense and pull the man on the left side back to help our point man, in case the ball changes hands. Thus, the side-court man on the left and the point man take the front man to their right. Our right-side man takes the back court man in his zone, the man on the line takes the opponents left back guard, and our big man takes the opponents big man (Diagram 2).

If the big man on the opposing team plays in the back line, a switch in assignment is made to keep height against height as nearly as possible. If the defense plays a man-to-man zone against the 1-3-1, assignments then switch to the man covering each offensive man.

Above all, the success of any press will be measured by the ability of the players to meet every situation. There is no place for indecision, since the split-second switching of assignments may be necessary.



Spring Football Practice

(Continued from page 18)

ters seems to be ample proof of this fact.

It is argued that by the elimination of spring football, the odious practice of tryout camps for high school seniors will be eliminated. But will it? Wouldn't it be much more honest and certainly more foolproof for conferences to adopt legislation which would prohibit tryouts?

In the current controversy, one coach pointed out that the elimination of spring practice would make the bidding for high school stars all the more pronounced because of the lack of time in which to teach fundamentals. Some of our most successful high school and college coaches were never stars during their playing days; many played very little. However, they did learn the game by being a scrub. With the football season for most colleges starting on Labor Day, and the first game the last Saturday in September or the first Saturday in October, very little time is granted for the teaching of fundamentals. Those well-grounded in fundamentals will comprise the team.

From Labor Day until the Saturday following Thanksgiving, the traditional closing date for most colleges, there are 71 days exclusive of Sundays. By contrast, the basketball season begins very close to the first of December and runs into March. From the first of December until March 8, there are 83 days, exclusive of Sundays and holidays, and this does not include the practice which has been going on for approximately two months prior to December.

To the best of our knowledge, little has been said about spring basketball practice, which is common on a number of campuses. Last spring and summer, when the basketball fixes came to light, there was much hue and cry about deemphasizing the game of basketball, but was one word mentioned about the elimination of spring practice—not to our knowledge it wasn't. This was what started us thinking on the matter. Why, if the elimination of spring football would help the deemphasis of that sport, wouldn't the elimination of spring basketball practice aid in deemphasizing basketball? As long as no one else thought of it, we came to the conclusion that spring practice probably had nothing to do with overemphasis.

Everyone else has sounded off on what's wrong with football and here is our candid opinion. Nothing is wrong with football that cannot be cured by some forthright honesty among college administrators.

Blaming the overemphasis on spring practice is not our idea of forthright honesty.

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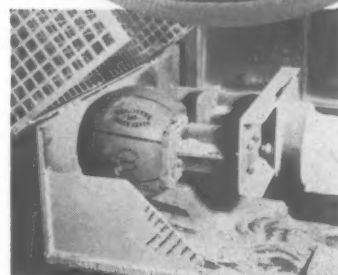
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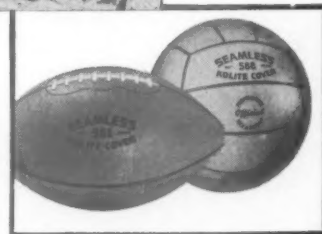
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